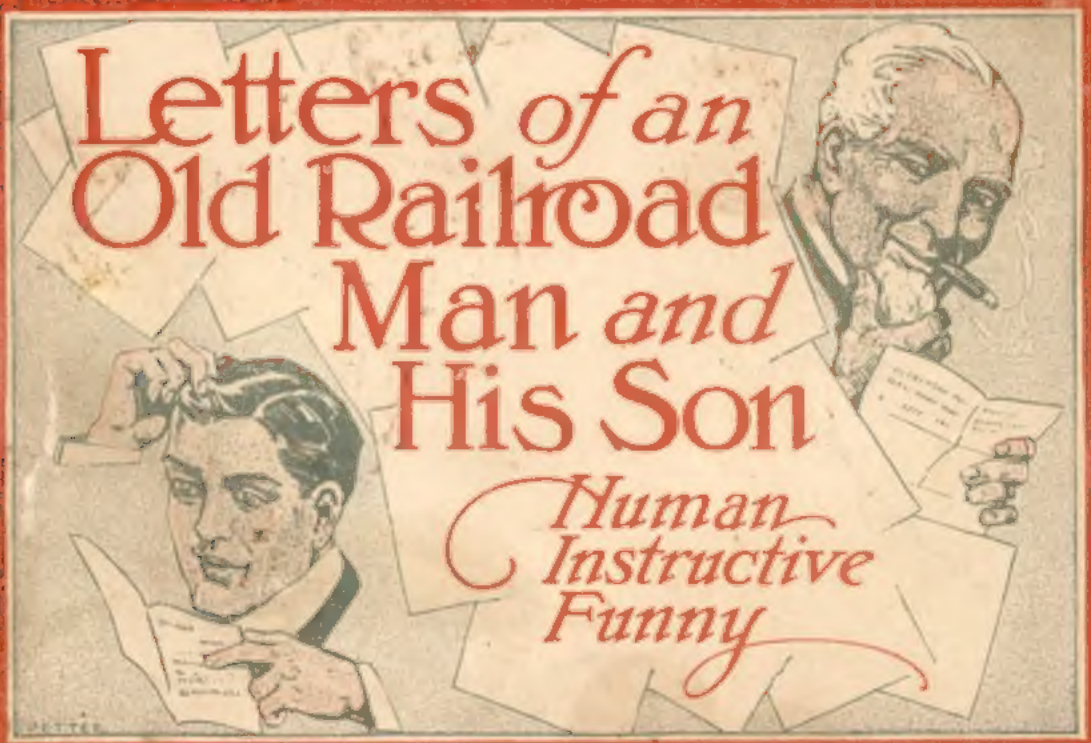
RAILROAD MAN'S MAGAZINE



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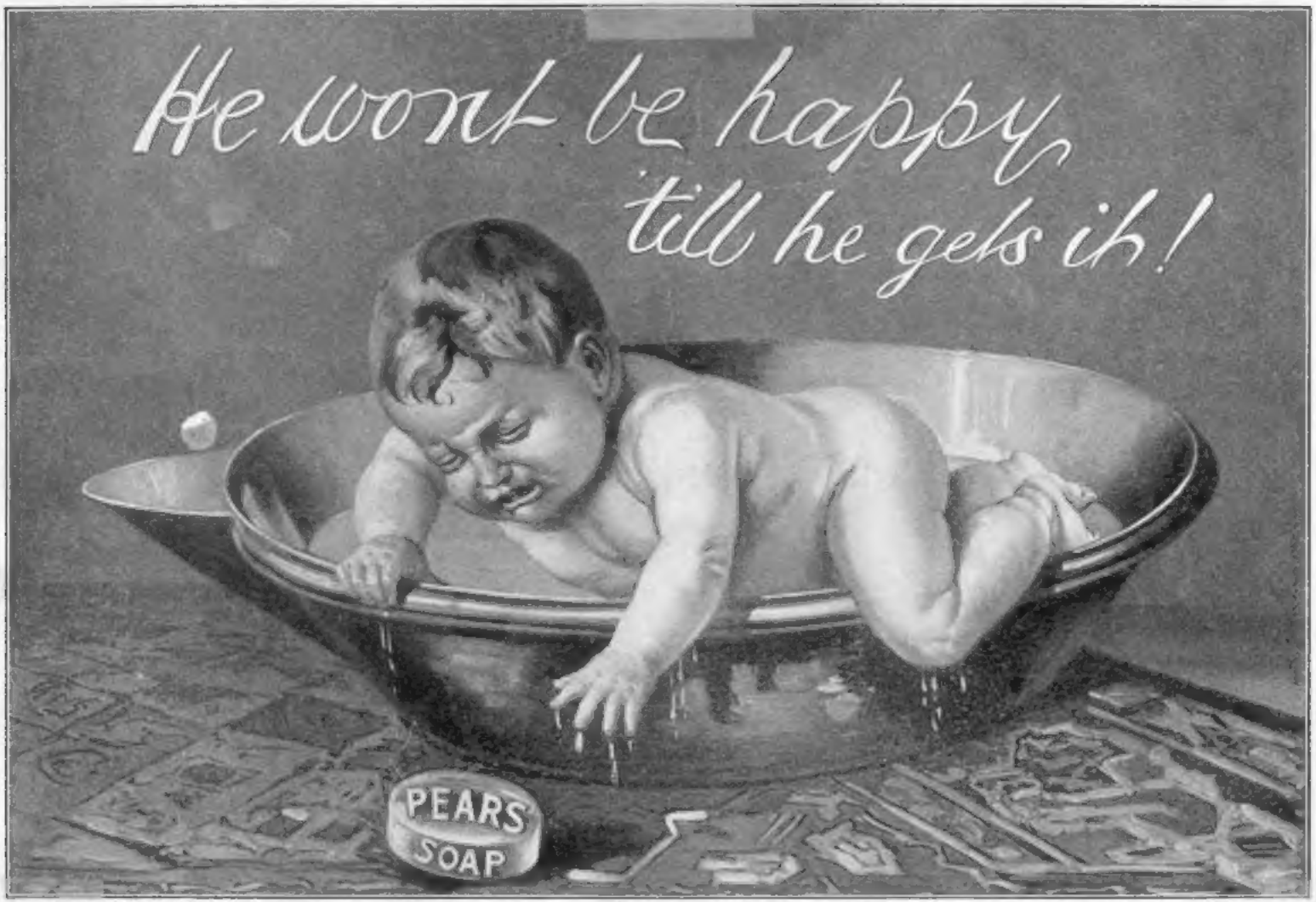

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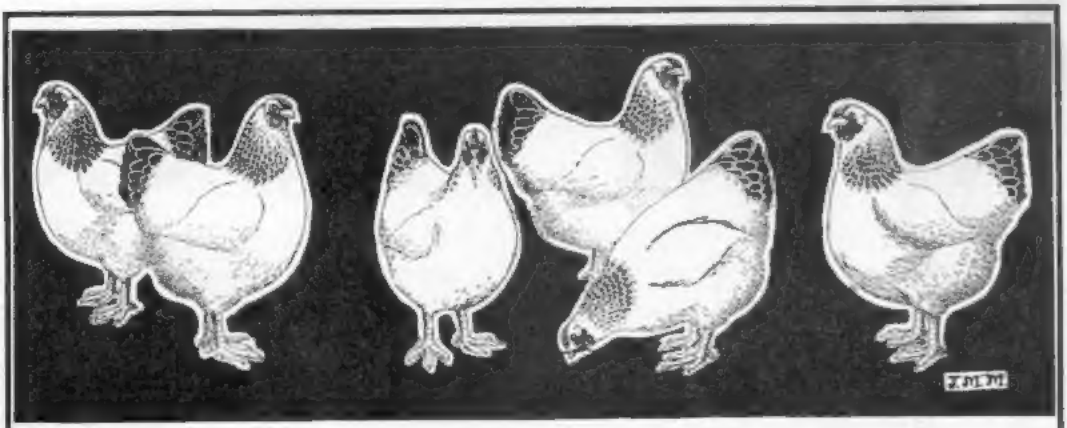

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WHEN I originally made the above statement, it seemed incredible, but now I can prove it by not only my own experience, but by the enthusiastic testimony of thousands of Philo poultry raisers throughout the United States. I will give you their names; show you their letters; prove to you just what they are making and how they are making it.

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are raised in a space of less than a square foot to the broiler, and the broilers are of the very best quality, bringing here 3 cents a pound above the highest market price.

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in a space of two square feet for each bird. No green cut bone of any description is fed, and the food used is inexpensive compared with food others are using.

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One of the secrets of success is to save all the chickens that are fully developed at hatching time, whether they can crack the shell or not. It is a simple trick and believed to be the secret of the ancient Egyptians and Chinese which enabled them to sell the chicks at 10 cents a dozen.

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Our new book THE PHILO SYSTEM OF POULTRY KEEPING, gives full particulars regarding these wonderful discoveries, with simple, easy-to-understand directions that are right to the point, and 15 pages of illustrations showing all branches of the work from start to finish.

Testimonial

DENVER, COL., Oct. 30, 1910

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DEAR SIR: No doubt you will be interested to learn of our success in keeping poultry by the Philo System. Our first year's work is now nearly completed. It has given us an income of over $500.00 from six pedigree hens and one cockerel. Had we understood the work as well as we now do after a year's experience, we could have easily made $1000.00 from the six hens. In addition to the profits from the sale of pedigree chicks, we have cleared over $960.00 running our hatchery plant consisting of 56 Cycle hatchers. We are pleased with the results and expect to do better the coming year. With best wishes, we are

Very truly yours, (MRS.) C. P. GOODRICH.

Others are successful in every state and Mr. Philo's NEW 96-page book entitled, Making Poultry Pay, gives accounts of their experience and success, and carefully selected matter of permanent value to every poultry raiser. This book will be mailed for 10c in stamps or money, or if ordered with the *New Enlarged Philo System Book* both will be sent for $1.00.

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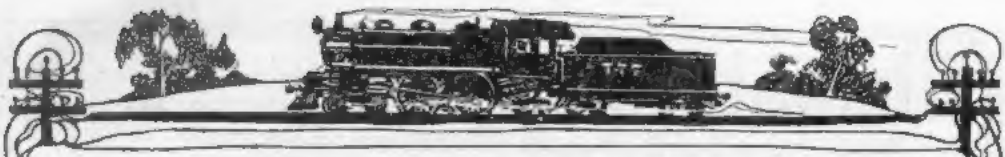

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ISSUED MONTHLY BY THE FRANK A. MUNSEY COMPANY

175 Fifth Avenue, New York, and Temple House, Temple Avenue, E. C., London

FRANK A. MUNSEY, President. RICHARD H. TITHERINGTON, Secretary. CHRISTOPHER H. POPE, Treasurer.

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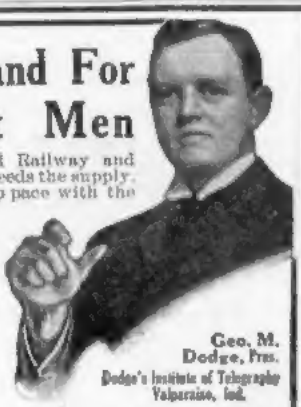

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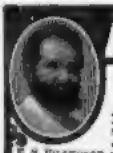

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RAILROAD MAN'S MAGAZINE

Vol. XVI. DECEMBER, 1911. No. 3.

"WHAT'S THE TIME?"

Railroad Man's Watch Guarded Against Mistake of a Single Second.

Vigilant Inspection Keeps It in Perfect Order and Prevents Grave Results That May Arise from a Few Moments' Difference in Schedules.

BY OLIN CRAWFORD.

LICK—click—click—click.

A wordless message—a succession of slow taps that spell nothing, but are of the utmost importance—is coming over the telegraph-wires.

Click click—click—click.

The eyes of thousands of railroad men turn to their clocks and watches.

It is seventy seconds before twelve o'clock noon. The taps are the warning that the time signal is about to be given. For a minute and a quarter or less the wires are cleared of all other business. In every tower-station and in hundreds of operating offices within the time-belt, watching the passing of the seconds has suddenly become the chief concern.

Click—click—click—click.

For an instant the wires are silent. Then comes a single click.

It is noon. No matter what clocks or watches may say, it is precisely twelve o'clock by the unimpeachable authority of

the Washington Observatory, where no mistake is ever made. Once in every twenty-four hours the railroads get the right time in this way.

The timepieces of almost any other business might be a few seconds or even a few minutes early or late without serious consequences, but in the running of a railroad the right time is an absolute necessity. Every second counts.

If the noon signal should be half a minute wrong, what endless confusion might result—what a tangle of schedules! But, day after day and year after year, the noon click never comes one second too soon or too late.

Still, this signal is not sufficient to insure correct time on the lines where such absolute correctness is needed the most. Most fateful of timepieces is the watch of the locomotive engineer. If his watch should be but one minute wrong, it would surely cause trouble. Disaster might follow. Incorrect time has resulted in scores of wrecks.

The engineer's watch is a wonderful thing. Within the space of less than one-half of a cubic inch, it holds the fate of train and passengers. An invisible grain of dust inside of it has more than once been responsible for a fatal wreck.

A watch is almost as complicated as the human body. The body has about two hundred bones. You breathe with lungs. The heart pumps blood through the vascular system.

No Baby Receives Such Care.

A watch has more than one hundred and fifty parts. The escapement is the heart. The mainspring gives it what is equivalent to muscular power. The balance-wheel provides self-control.

If one of the one hundred and fifty parts of the engineer's watch is in bad order, no one can presage how terrible the result may be. No human body receives such care or is kept in such perfect running-order as this small machine so charged with destiny.

Twenty years ago there was a wreck on the Lake Shore and Michigan Southern Railroad at Kipton, Ohio, in which eleven lives were lost. The fast mail known as No. 4 was running eastward. An accommodation-train was coming from the west.

At Elyria, twenty-five miles west of Cleveland, the engineer and the conductor of the accommodation were given orders to let the fast mail pass them at Kipton, a small station a short distance west of Oberlin.

As the accommodation was leaving the station at Elyria, the telegraph-operator ran to the platform and cautioned the engineer and the conductor, although both men had received written orders.

"Be careful!" shouted the operator. "No. 4 is on time."

"Go to thunder!" the conductor called back. "I know my business."

From the time the train left Elyria until it collided with the fast mail at Kipton, the conductor did not take his watch from his pocket. This he afterward admitted. He explained that he supposed the engineer would look out for No. 4.

Lost Four Fatal Minutes.

Something happened to the engineer's watch. At Elyria it was right to the second. The next time he looked at it, it was four minutes late, but he did not know it.

There were several stations between Elyria and Kipton. The engineer pounded slowly along in the belief that he had time to spare. As his train rolled out of Oberlin he thought that he had seven minutes in which to reach the meeting-point.

As a matter of fact, he had only three minutes. Even then he might have made it had he run at full speed. If the conductor had looked at his watch, which was right, he could have prevented the accident.

When the trains collided at Kipton the fast mail was running at full speed and the accommodation was under brakes as it was nearing the station. The engineers of both trains were killed, and nine clerks perished in the postal cars.

One of the witnesses summoned by the coroner of Lorain County at the official inquiry was Webb C. Ball, of Cleveland. He had not seen the accident, but was called as a watch expert.

He testified that the hands of the engineer's watch had evidently stopped for four minutes and then had started again. What invisible flaw had been responsible for the disaster?

Perhaps a speck of dust not one-tenth as large as the head of a pin. Any one of a dozen things might have detained the hands for those four fatal minutes. Perhaps a flaw of less than a thousandth of an inch

in the cannon-pinion loosened the minute-hand.

From the coroner's inquiry the case was finally carried to the United States Court at Toledo. Ball went there several times to testify. While returning from the trial to Cleveland, he fell into conversation with John Newell, president of the Lake Shore road, and William H. Canniff, the superintendent.

Ball Gives Vital Testimony.

"That Kipton accident ought to teach a lesson," said Ball. "The engineer's watch was unreliable, and the conductor did not look at his. The railroads ought to have a system of watch inspection and a code of rules governing the subject. One of them should compel conductor and engineer to compare watches."

The suggestion made a deep impression on President Newell. A little later, when a meeting of the operating officers of the road was held, Ball was authorized to prepare a plan of inspection, and also to investigate conditions on all of the important lines east of Chicago.

In his subsequent travels the watch expert found a curious state of affairs. Railroads were carelessly conducted in respect to clocks and watches. Almost every city and town had its own uncertain and variable time. In some places the ringing of the school bells and the whistles of factories were the nearest approach to official time.

Standard time had been adopted by the railroads, but it was usually unpopular, especially in the smaller towns and country districts. Most citizens were in favor of sun time, and some of them denounced the railroads for interfering with the dictates of the family clock.

Traveling through Ohio and keeping a record, Ball found seventeen different kinds of time in as many cities.

Wanted Real Time, Not Vanderbilt's.

In one place he fell in with a well-known local character of advanced age.

"Confound Vanderbilt's time!" cried the old gentleman. "We want God's time!"

The confusion of time among the inhabitants was amusing, but on the railroads it was a terrible menace. It seemed as if only Ball realized the danger.

He found that the conductors of the freight-trains of trunk lines were depending on cheap alarm clocks hung in cabooses. It was not unusual for one of these crude timepieces to gain or lose five minutes in a day.

The watches of the engineers and conductors of even fast passenger-trains were of the worst type. An inducement advertised by storekeepers was the presentation of watches with suits of clothes and haberdashery. These watches would keep time about as accurately as an hour-glass or a candle. A large percentage of engineers and conductors obtained their watches with their clothes.

At the time that Ball was making his tour of investigation—an investigation that made railroad history—some of the clocks in roundhouses and in train-despatchers' offices had not been cleaned, regulated, or repaired for years. The rule was to give conductors and engineers five minutes extra on their orders. A train would, therefore, be safe if it arrived five minutes before or after its schedule time.

At the end of four months Ball had formed his plans and put them into operation. Local time-inspectors were appointed at the end of every division on the Lake Shore road. Rules were made requiring conductors and engineers to have their watches examined once in every two weeks

Keep Complete Record of Watches.

If a watch lost or gained thirty seconds in fourteen days, it had to be repaired or regulated at once. Cards were given to engineers and conductors, and complete records of their watches were kept.

When a conductor or engineer left his timepiece to be regulated or repaired, he was given what was called a "loaner watch." This was guaranteed to keep time correct within the fraction of a second.

Certain makes of watches that did not equal the standard were barred. The ta booed manufacturers protested loudly and threatened suit, but the railroad stuck to its guns, and the angry manufacturers found themselves helpless. The watches that were given away with suits of clothes were no longer allowed on the lines.

Rapidly the other large roads of the country, and most of the smaller roads, followed the Lake Shore's example. To-day there are very few lines on which there is

no regular watch inspection. Unfortunately, most of the roads that are careless in this respect have only single-track lines, and it is on the single track that the engineer's watch is of the most importance.

On the main lines of roads like the Lake Shore, the New York Central, and the Pennsylvania the watch might be wrong, yet the block signals would probably avert an accident.

Still, the elaborate system of inspection and the rigid rules have not robbed the watch of its menace. It will always be a fateful thing on the railroad.

Stem-Winder Caused Wreck.

The stem of an open-faced watch is opposite the figure twelve. The stem of a closed watch is opposite the figure three. An engineer who had removed the case might absent-mindedly read the time as he would from an open-faced watch.

A few years ago a freight engineer who had taken the case from his watch made a mistake of fifteen minutes. Rounding a curve, he crashed head-on into another train. Several lives were lost and both engines were wrecked.

Three years ago the engineer of a passenger-train on a railroad in the Middle West found that his watch was not in good order. He borrowed his wife's.

His wife's watch possessed a peculiarity. It would jump two or three minutes backward or forward now and then. He set it right as he climbed aboard his engine, but later the minute-hand jumped. It must have moved twice, for it was six minutes slow. Suddenly another train loomed ahead of him from around a clump of trees. The engines crashed together and several lives were lost.

On one of the biggest railroads in the country several years ago there was a collision that cost the lives of forty passengers. No two of the four watches of the two conductors and two engineers involved in the accident agreed and none was correct.

Clocks Were Old and Unreliable.

The railroad telegraphed for Webb C. Ball to put its timepieces in condition. Ball sent an assistant over the road who posed as a telegraph-operator in search of a job.

The assistant discovered that the clock at the operating headquarters was forty-five years old. He also found that the clocks at the telegraph- and tower-stations on the main line and branches were all unreliable.

The watches of conductors and engineers were keeping time without any attention to the Washington Observatory's dictates. Each watch seemed to have a time system of its own. Ball condemned the clocks and watches, and there followed a very gratifying decrease in the number of accidents.

To-day Webb C. Ball supervises the watch inspection of more than fifty railroads including more than one hundred and twenty-five thousand miles of road. He has done as much as any other living man toward making travel swift and safe. When he travels in seventeen hours and fifty-five minutes from New York to Chicago he knows that he is one of the principal factors that have made that record-making journey possible.

Imagine running the Twentieth Century under the old system of time-keeping! The engineer's watch would have one time, the conductor's another. Both might be wrong. It would be an impossible condition. For with such a train every second must be guarded.

Slight Delay May Cause Congestion.

Nowadays, if a fast passenger-train is thirty seconds off its time, the conductor must report the fact at the first stop. Consequently he would experience much difficulty if his watch was not in perfect order.

At the Grand Central Station in New York, where a train arrives every minute and a half, a trifling delay may cause serious congestion. During the last few months the Central's rules in regard to making exact time have become more and more rigid.

Not long ago a passenger-engineer who read his watch by the half-minute rather than the second, arrived feeling confident that his train was on time. His watch showed that he was fifteen seconds late, but he thought that such a trifle would make no difference.

"You are twenty seconds late," he was told, and he was summoned to give an explanation.

The result would have been the same if it had been only fifteen seconds, as he thought. He went up-stairs to the watch inspector's office and found that his timepiece was five seconds slow.

On the New York Central and other big

roads the inspection is practically the same as that installed on the Lake Shore almost twenty years ago. Watches must be brought to the inspector once in every two weeks, and if they vary more than thirty seconds within that period they must be regulated or repaired.

Must Carry Standard Watch.

The employee may carry any watch he chooses if it is up to the standard set by the chief inspector. His watch is his own, purchased with his own funds. A watch up to the standard costs at least forty dollars.

Engineers and conductors are likely to take pride in their watches and to pay much more than that for them. Many an engineer carries a watch that cost two or three hundred dollars and that does not vary five seconds a month.

He may go to the watch inspector as often as he pleases. If he is prudent, he goes more often than once in two weeks in order to have the correct time every day.

On most of the big roads the inspection applies not only to engineers and conductors, but to trainmasters, assistant trainmasters, firemen, train baggagemen, passenger-trainmen, freight-brakemen, yardmasters, assistant yardmasters, road foremen of engines, master bridge and extra gang foremen, and sometimes other employees.

A busy place is the watch inspector's office. That of the inspector at the Grand Central Station is located in a small room. All day long railroad men are applying to have their watches regulated.

The engineer of one of the fastest through trains on the line enters. His watch is one of the best in the service. He pulls it out with an anxious shake of his head.

"Something wrong with it," he says.

The inspector adjusts it to absolute accuracy and remarks that it was six seconds too fast.

"Six seconds!" cries the engineer. "Why, it hasn't varied that much in six months. What's wrong?"

"I don't know," the inspector responds. "There's no telling what makes a watch gain six seconds in two weeks. There are lots of mysteries about these things we'll never understand. It may not vary six seconds again for a year."

With one hundred and fifty minute parts, a watch is too complicated for an inspector ever to become its absolute master.

There are watches so made that they are proof against changes of the weather, and so remarkably fine and exact in construction that they sometimes vary not a second a week. Suddenly something damages them and they gain or lose seconds in a most puzzling manner.

In some respects a fine watch is the most wonderful thing in the world. Its balance vibrates 157,000,000 times a year. In that period the rim of this tiny wheel travels twice the distance from New York to San Francisco.

It sometimes makes that journey, with those millions of vibrations, without losing or gaining a single minute.

Magnetism Is Greatest Obstacle.

The driving wheels of a fast locomotive usually average four hundred and twenty thousand revolutions in twenty-four hours. They are oiled after every three or four hours of service. The rim of a watch-balance often moves without cessation for ten years or sixty thousand miles and more without oil. A watch should be oiled once in every six months. Then only a drop so small that it can be lifted on the head of a pin is necessary.

When a railroad watch becomes particularly unreliable the first thing the inspector looks for is magnetism. This mysterious visitor gives no warning when it takes possession of the works. Under its influence a faithful timepiece becomes exasperatingly capricious.

Magnetism is one of the greatest obstacles to the keeping of accurate time on the railroads, for electricity is everywhere. Most of the big railroad terminals are a network of currents which are a constant menace to watches.

An engineer may run through them for years and his watch may remain immune. On the other hand, it may become magnetized twice in a month. The inspector subjects it to a bath in an alternating current for one second and the magnetism is eliminated.

Recently the engineer of a fast through train on the New Haven road arrived in New Haven three minutes late. He thought he was on time to the second. His watch had lost three minutes on the run from New York. He was puzzled. The division watch inspector discovered that it was full of magnetism.

On Berneice Hill

by

Ed. E. Sheasgreen

IT was one of those dark and fretful nights when the mountains, clad in terror, seem so close and angry that one longs to be near some living creature. On such a night, if one is a railroad man, he does not care to leave his train. It had rained just enough to loosen pebbles and rocks and let them slip down the mountain into the stream or to a place on the track.

Men in the mountain service dread such a night. They are on the alert then for accidents, for rails are slippery and brakes uncertain

At the station of Boulder stood two massive mountain - climbers. From them echoed in sleepy cadence the heavy breathing of their air-pumps. These engines had been taking coal and water, and were now coupled to an unusually long and heavy freight-train.

The 52 was in charge of "Sheriff" Alinson, a typical Western man, born and raised on the Mountain Division, who at one time had served his county as sheriff The 50, in charge of "Sandy" Mitch, was ahead of the caboose and behind the last freight-car; for so powerful an engine, pushing on the empty caboose, might crush into it when least expected as if it were an egg-shell.

Neither could the 50 work if coupled ahead of the 52, as both engines were of the most modern and powerful type, and the numerous culverts and bridges had not been strengthened to accommodate their combined weight. Any attempt to run two hundred tons of working steel and iron over such places would mean disaster.

Under protest Conductor Collinson had picked up three preference loads at Boulder. His train, a solid "air"—something then unusual—with these additions would be longer than any side track could hold, for as yet all the sidings had not been extended to equal in length the strings of cars these massive new engines were hauling over the worst mountain grades.

But in the general office orders had gone forth that no train was to be run light of the tonnage specified for the class of engine hauling it. Taking all conditions into consideration, trains were going over the division with more cars than safety to life or property would allow.

Train and engine men knew what it meant if their trains got away from them —immediate dismissal from the service. Thus it was up to them to lift the heaviest end of the burden.

All trains do not handle alike, neither do all brakes hold the same; and often it happens that, with every man-jack of the crew doing his best, the train will start sneaking away to seeming destruction—and these runaways are among the worst propositions with which mountain men have to deal.

The very thought of a runaway chills the blood, and makes strong men weak. It is one thing to be wheeling along fifty, sixty, or even seventy miles an hour over road conditions that will admit of this speed, and

feel—yes, know—that unless some unforeseen danger should instantly arise the train can be brought to a safe and easy stop at any desired place. This knowledge and assurance is sufficient to inspire confidence.

But it is quite another thing when the air-pump is not able to furnish the supply of air to the air-brake cars, when "retainers" have lost their usefulness, and the combined strength of two or three strong and determined men is not sufficient to club up the brakes and reduce the speed; when all the wonderful inventions of man to insure safety on trains have been applied; when the iron horse has taken the bit into his teeth, so to speak, and the train, instead of being under control, becomes a twisting, howling monster, hurling itself into curves, onto creaking trestles, and out over rushing torrents!

Then the mountains seem rushing skyward, and the valleys are deep wells down which you drop, only to land at the bottom in a crashing mass of wreckage; then it is that hair often turns white, and strong men break down and cry like children; then knowledge and assurance, instead of inspiring confidence, bring utter consternation and helplessness as one waits for the end!

Collinson and his engineers, knowing all these things, had rebelled at picking up the extra cars. They were told they could "do that or quit," so picked them up, for they had worked hard and long for their positions.

Collinson brought this order from the office:

> Extra 52 west, helper 50, will meet extra 57 east at Berneice.
>
> A. O X

After the sheriff read it, his conductor said: "Say, don't be afraid to put th' nose of th' 52 as close th' main stem at Berneice as you can, for we might get into clear. If we don't, an' th' 57 should be coming like blazes—well, th' stuff would be all off for some poor fellers." And Collinson started to the rear to deliver a copy of the order to Mitch.

Now, Mitch was what is often called, in mountain service, "a prairie sailor"; that is, one who has always worked in a level or slightly hilly country. When he was sent to the mountains for the rush he brought a record for first-class judgment. He showed on several occasions when in tight pinches that he not only had good judgment and knew how to use it, but that he also had the nerviest kind of nerve.

After Mitch had read and properly understood the order, Collinson yelled up from the ground: "Sandy, old boy, we've got a pretty bunch to-night, an' it may be an all-fired close squeeze at Berneice; but if you're Mr. Johnny-on-the-spot, why, we'll be O. K." And he waved his lantern as a signal to go.

Two blasts of the deep-toned whistle of the 52 echoed and reechoed along the dark valley, to be immediately answered by the 50. Gradually, and with little slipping, the sheriff got the slack out of the long train up to a point where the 50, under slight steam, began to be of service. They stopped at the branch railroad crossing, a quarter of a mile from Boulder, and then went swinging up the water grade toward Basin, Mitch and his fireman chewing the smoke and cinders of both engines. The cars ahead of the 50 rolled and rocked from side to side, while the couplings groaned a mighty chorus of the power behind.

The sheriff's fireman was as busy as was "The Kid," who handled the scoop for Mitch. At regular intervals the night and the haunted valley would be lighted in a flooding blaze, then darkness, then another quivering flash, and the night would be left darker than before

In the glow from the open fire-doors the clouds of steam and smoke, and the foamy mountain torrent along which they were running, flushed and shimmered in the red flashes, while trees and brush on the mountainsides stood out strong and bold, only to be instantly lost in the lonesome night when the doors were closed. When both firemen were putting in fires at the same time, and this was frequent, the lightning effect doubled and the darkness deepened.

They began to leave the grade at Basin for the steeper one that winds toward Berneice, there to rise to the steepest of all on that division—a grade of nearly four per cent.

Across the half-circle the line makes there Mitch could see up ahead, and at quite a height above him, the dim light of the gage-lamps in the 52. With every fire that was fed he could see, in the flash from the glowing fire-box, the sheriff in his cab, the steady-playing rods of the drivers, the lurching cars, and the working rods of his own engine.

After rounding a curve to the right, east of Basin, Mitch dropped the reverse-lever a few notches forward. At almost the same instant the sheriff responded with the 52. Where there had been an angry, muffled growl from the iron-throated monster now came a steady, deafening roar, with the sparks flying far into the clouds.

Soon Basin was lost in the night, and the fire-panting creepers, after a hard climb, dragged into Berneice siding to clear the main line for extra 57. Just as was expected, it was found that the siding was too short for the train. The caboose, the 50, and one car were sticking out on the main line, while the second car only partly cleared.

Collinson at once had Mitch whistle out the head brakeman to go up the mountain as fast and as far as possible to flag extra 57. The question in every one's mind was: "Will the extra come down the heavy grade under control, so it can stop on being flagged, or will the air give out and a runaway come into town, to find the main line blocked?"

II.

EXTRA 57, with a heavy train of ore, had had a long, slow climb from Butte. Even with a helper the train had nearly stalled in curved tunnel 10, but finally reached Woodville, where the helper returned. From Woodville to Elk Park, the station at the summit of the Berneice Mountain, the grade is easy, and one engine can handle with but little effort a train that two can scarcely lug up from Butte.

On either side the valley, which is a natural park, are two great ranges of mountains with the heavens seemingly resting on their shoulders. In the sunshine or in the moonlight a ride across this park is a pleasure long to be remembered; but when the night is black and threatening, and the headlight is of no service, seeming to shine on, but never penetrating, the wall of night that lies but a few feet ahead of the pilot—it is then, no matter how sleepy one of the crew may be, that he is all eyes and ears.

Before he is aware, a mile has slipped by, and the only evidence of this is the grinding wheels and rocking car or engine.

He sees no familiar object or landmark, and even those made visible by the headlight come and go in such rapid succession that the feeling soon prevails that it is his train which is standing still while the earth is galloping by underneath.

And so every one on extra 57 was wide awake, watching sharply for the lights of Elk Park to appear, and wishing for daylight.

They had received orders at Butte to meet extra 52 and helper 50 at Berneice. While the fireman was taking water at Elk Park, Engineer "Dad" Wollner—an easy-going man, small of stature, with squinty eyes and stubby beard, who had a queer habit of pronouncing certain words in his conversation with more force than others—gave the air a final test.

In making this stop Dad had not used much air, so, after the brakes had been released and the air-pumps had again recharged the train line, the two brakemen with their conductor took stations on the ground.

Conductor Robb, a big man with a large, fiery face, swung his lantern to "stop," and the engineer applied the air severely.

Then all the brakes were examined while set. When this test was over, a signal was given and they were released so that the "recharge" could again take place. The crew now climbed to the tops of the cars and began clubbing-up the brakes on the "jacks," or non-airs, and to turn up "retainers" on the "air" cars.

Dad had dropped to the ground, and was pounding the sand-pipes open when Robb walked up, stuck his lantern close to the stooping engineer's face, and said:

"Hang to 'em like a sucker, old man! They're heavier than th' devil's hind wings. We don't want to mix up with any mountain real estate a night like this."

"No; neither do we want to become carpet figures. Bet your neck I'll hang to 'em! Those fellers at Berneice may not be into clear, and we certainly don't want to pile in on 'em!" Dad drawled in his quaint way.

"You're th' doctor. Give me a light."

"Shouldn't think *you'd* need one, with a face like yours. Saw you comin' twenty cars away," replied Dad, as he held up his torch.

Owing to all the brakes being partly set, it was all the 57 could do to get the train to move. Every man, realizing what might happen if the train ran away, had done his best to "set 'em up" so that full control could be kept.

From the start the men were out on top, each lantern seeming like a small candle in the intense darkness, yet sufficient to mark the position of each.

During the first two miles the speed had increased, but not enough to make any one feel unsafe. Dad and every other member of the crew had done and was doing his best.

The old engineer had just glanced up to the air-gage to see how the air was holding out, when suddenly he noticed that the air-pump had stopped. He missed its incessant coughing.

This was positively serious. If no more air could be pumped the whole air-brake equipment would be inoperative. He grabbed the hammer, ripped open the front cab-window, reached out, and struck the pump head a blow.

There was no response. The speed had been slowly gaining. With wild yanks of the whistle-cord, he sounded the "defective air-brake" signal. Every man of the crew was startled. They almost stopped breathing, but rushed at the hand-brakes of the "air" cars like mad.

The train had sneaked away from them. It was now beyond their control. The trainmen "doubled up" on every brake as fast as they could. Wollner stood up and looked back over the train. He could see the lights at a height above him rapidly changing.

Now those in the center would be far to the right; the caboose lights far to the left, or out of sight altogether. Now they would shift to another position. Now all would be in a straight line.

These changes were rapidly made as the train shot around curves or down straight stretches of track. Faster, and still faster! As a stone drops down a well, they gathered in speed and shot through the night!

In such fierce pinches as these it often happens that the train-crew will crawl to the caboose, cut it from the train, and thus save themselves. But Robb, being a man of great nerve, never countenanced such work, believing that when a man entered the service he should be ready to take matters as they come, runaway or no runaway.

Then, too, he did not like the idea of deserting the "head end" at such times. He said it looked "gosh-hanged cowardly." Therefore he and his crew, when they realized what they were up against, lay face down on the cars and held hard, expecting every lurch to be the last.

Dad and his fireman felt that something would be wrong at Berneice, yet spoke not a word.

If they could only let the extra down there know they were running away! If there was only some way to flash a message to them!

What if extra 52 had not yet reached Berneice?

With a jump, Dad grabbed the whistle-cord, stretched it out over the head of the lubricator, where it held the whistle wide open, and out on the night air wailed the voice of the 57 like some terrified animal in its death cry—the only warning that could be given!

III.

The sheriff, a burning torch in his hand, was on the ground at Berneice siding, looking anxiously back at the blocked main line. Collinson was running to the telegraph-office to find out if the 57 had left Elk Park. If not, he was going to ask that it be held there for his train.

Mitch was on the ground two or three cars distant from the 50, listening for the first faint sound of the approaching train. Beside him was the rear brakeman. The valley was silent, except for the cough of the air-pumps or the echo of an occasional falling stone.

Instead of the distant rumble Mitch expected to hear—the rumble that for an instant would sound, then die away to come again nearer and stronger—he heard from afar, and echoing from among the crags, a low, wailing whistle.

It grew faint, then sounded stronger and closer—a long, steady note of warning.

At the first call of the whistle the sheriff turned quickly about; Collinson stood stock-still; but Mitch, the one man who had been listening so intently—the man who had just one chance to do his part to save the lives of the crew on the runaway—grasped the situation at once.

Jumping to the cab, he called to the rear brakeman:

"Hey, Doc, cut 'er off to clear! For Heaven's sake, hustle! Quick! They're runnin' away!" Then to the fireman: "Get a load in 'er, Kid! Get a load in 'er!" And slacked ahead.

For Doc to close the angle-cock in the train-line with one hand and raise the pin in the Janney coupler with the other was but the work of an instant. With the yell from him, "Go!" Mitch reversed, the air-hose parted with an angry *pish*, and with the caboose behind him, and two loaded

box cars ahead of him, he started at break-neck speed back down the grade up which they had so slowly labored.

Closer came the steady cry of the runaway, long and sickening, freezing the blood in their veins!

The distant thunder of the rushing monster could be plainly heard at Berneice; the *to! to!* in answer to the flag sent out by Collinson sounded sharp and clear; but an army of flagmen with swinging lights, fusees burning, and torpedoes set could not check the wildly rushing train. Might as well flag a comet, and expect it to stop!

The sheriff, his fireman, Collinson, and the station operator ran up the mountain-side back of the depot, to be safe should the 57 jump the track in their immediate vicinity, for there the line marked a sharp curve to the south—a regular "elbow"—a wicked place for a derailment. Doc also had hastened to a place of safety.

Mitch had hardly got a good start when, with deafening roar and screeching whistle, there was a quick silvering of the rails at the curve, and the headlight, like a great ball of fire swinging right and left, and the huge hulk of the mountain-creeper with the crew hanging on either side the gangway, rocked thundering by.

There was one long, black streak of swaying, leaping cars, on the tops of which lay the trainmen beside their flickering lights.

From the wheels angry streams of fire were shooting and sputtering. There was a wink of the green markers on the caboose, a flash and a shimmer of the red lights of the rear, a volley of stones and rocks, and the howling extra fell by Berneice with a power that shook the sleeping mountains, and was lost in the distance to chase Mitch with the reeling caboose behind and the rolling cars in front of the 50.

In such a moment there is little inclination among men for conversation. All Mitch had to say had been said at Berneice. Neither he nor his fireman had spoken since.

At the start, Mitch, his back to the front of the cab, had stood upright alongside his seat-box, placing his knees on it, grasping the throttle-lever with his right hand and the side of the cab with his left.

The first "clickety-clicks" had grown to a loud and rapid chatter, then merged into a roar. As they plunged from Tunnel 7 into the wind on the other side of the mountain he lost his cap. Bareheaded, his hair wildly blowing back, his bandanna sharply snapping behind his neck, and his jacket, like a big bag puffing out over his shoulders, he clung on with might and main.

Up to this time the Kid had never experienced a runaway. This was the nearest to it, and was a runaway of high class, but a voluntary one on their part.

Often he had wondered what such an experience would be like, what the sensation of being mixed in a bad wreck.

Just now all that he could do was to watch the shadowy outlines of his engineer's face through the dim light cast by the steam-gage and water-glass lights. His eyes were partly squinted, his lips drawn so tightly that the closely cut mustache completely covered the lines of his mouth, his chin protruded sharply, and his jaws working his cheeks in and out.

Amid all the heaving, rolling, pitching, and tumbling, he could not help but think of some of the experiences Mitch had told him.

They slammed around a curve and then into Tunnel 6, a reverse-curve tunnel a quarter of a mile long.

The 50 pitched far to the right, reeled back to the left, and the Kid found himself on the deck while over him rattled the glass from the broken globe of the steam-gage lamp, which had been thrown from its place and the light blown out.

Then, with a lurch to the left, with muffled echoes of the protesting clang of the bell telling they were still in the tunnel, he was banged against the right wind-sheet and again thrown to the deck.

Mitch had nearly fallen, too, but had saved himself by winding his right arm about the reverse-lever and grasping the fire-door chain with his left hand.

On to Basin they flew, and by that town. On and out to the water-grade toward Boulder he urged the 50, praying that he might reach there in safety, yet expecting, at every wild pitch of the engine or far reach of the caboose lights, to be hurled to the ditch!

There the roaring, pursuing, wildly calling thing would grind him to dust!

The Kid had just picked up an oiler which had fallen to the deck, when Mitch grabbed him by the shoulder with the right hand and snapped out:

"Here, take this switch-key! Get to th'

dog-house! Line 'em up—when we get—t' Boulder!"

The Kid, instead of dreaming of or watching others do a daring deed, was to perform one himself.

Nothing daunted, he pocketed the key, grabbed the white light, and made a run up the coal-pile of the partly emptied tank.

Mitch was watching him closely. It was no use to look into the dark. He could see nothing, the night was so black. Up to this time he had been guided by the reeling caboose-lights.

They swung around a curve to the right. The Kid reeled, lost his balance, fell and slid to the apron in the gangway, smashing the lantern.

Once more, this time without a light, he rushed up the coal-pile, gained the top, and carefully picked his way to the back of the tank. He pitched to the right, plunged forward and side-stepped as if drunk.

Mitch raised a little higher, stretched his head far up.

Had the boy fallen down between the tank and caboose?

Ah! how relieved he felt when he saw the outlines of the lad rising against the red haze of the top cupola light and reaching out over the black abyss from whence came angry, snarling sounds of the wheels calling for blood!

Cautiously the lad crouched and slowly lowered himself from sight over the back of the tank and down the ladder to the platform and among the warring sounds.

Mitch never took his eyes from the place where the shadow had been seen. Presently the head appeared, then the shoulders.

His fireman was climbing the ladder again! The door must have been locked!

The young fireman crawled on his hands and knees over the roof of the pitching caboose to the cupola. He tried the side windows. They, too, were fast. He slowly raised himself, grasped the hand-holds on the top of the cupola, and with his body extended out over the lurching edge, "toed" himself to the rear of the "look-out," where he again dropped from sight as he descended the back caboose ladder to the rear platform.

Mitch now thrust his head and shoulders out of the cab window to see if he could catch the faintest outlines of the Kid.

Had he really gained the platform, or had he fallen and his screams been drowned by the madder screams of the wheels? Was he alive on the platform, or was he up the line dead, in the path of the runaway, again to be run over?

Mitch, forgetful of self and always ready to sacrifice anything for his mate, climbed to his knees on the arm-rest of the cab window that he might reach still further out.

There was no sign of the boy! The darkness was so heavy that it hurt as he was hurled against it! Out there the howl of the wheels sounded louder—the rush of air smothered him—he caught his breath!

What of the Kid?

He slid back into the cab—he would stop and find out where the boy was! No, that would never do, for the runaway was after him and he knew not how close it might be.

Now another thought tortured him. He was rapidly nearing the railroad crossing at Boulder! Should he stop there or take the chances that no train was using it?

If he stopped, his pursuers might catch him. If he did not, he might catch some one at the crossing.

Again he filled the cab window with his form, this time to locate a crossing landmark as well as to look for his fireman.

There was a crash, a clatter, and a bang! The crossing had been reached. For an instant his eyes closed, then opened. His train still held the rails.

The lights of Boulder, small as fire-bugs, blinked in the distance. He "dynamited" the air, tooted a signal to the Kid — if the boy was safe on the back platform—to set the caboose brake. Then they slowed down for the passing track-switch.

He saw the merest semblance of a shadow drop from the rear steps and run to the switch. In an instant the white light flashed red, and out of the dark came the Kid's voice signaling him "back."

When in to clear the voice signaled "stop," and the switch flashed white for the main line and the extra.

IV.

The 57, in close pursuit of Mitch, had flared through the night like some gigantic torchlight procession, fire flying from the brake-shoes and wheels and hot boxes.

Its defiant roar had awakened the sleepers along its mad run. If I could hold the snakelike track in Tunnel 6 there was hope for gaining control once more on the water-grade just beyond Basin. That hamlet seemed but a blur on the mountainside as they fell by it.

At this point the crew, trusting in the water-grade, again tackled the brakes.

As they crawled on hands and knees from one brake to another, they tried to keep an eye down the dark for some sight of the pursued, every nerve and muscle braced for the final lunge they had long expected would heap them in the ditch.

About half-way down the water-grade, where the speed should slacken, they, too, had thought about the Branch crossing; but the tonnage monster was not so easy to get under control as they had hoped.

It kept dropping toward Boulder with hardly any sign of slowing speed. Eagerly they watched for their headlight to tell them that there was nothing on the crossing!

If there was—

They took the crossing with a smash, swung gracefully around the slight curve toward the town, and there beheld on the siding and safely to clear the lights of the little train they had been chasing.

Each man felt his heart beat again. Strained nerves began to relax, and hands trembled that had been as steel before. The sharp mountain air tingled in their nostrils. The one continuous, mighty roar they had been hearing gave place to merry clickety-clicks. They rattled by the siding, clattered by the depot and tank, and ran through the town for a half-mile up the stiff grade to the north.

Mitch had just reached the office when he heard the extra out at the crossing. Calling for the operator to come out and "get an eye full," both of them stood on the platform and yelled like demons, amid a shower of sputtering sparks from grinding brake-shoes and the smoke and blaze of hot-boxes, as the runaway rumbled by them leaving a stifling smell behind.

With flat wheels pounding, the finally subdued monster soon backed down to the tank. When the head-end of the train had nearly reached the depot, Robb and the rear man dropped off. As soon as the engine had stopped at the tank, Dad and the head man joined their fellows.

"How do you braves like falling out of a balloon at night?" asked Mitch.

"Well, never you mind. We tackled only the high spots. Section men won't have to fix 'em neither. Knocked 'em all down," Dad answered as he spat on one of the hot boxes and watched it sizzle.

"S'pose we have to look for another office," thoughtfully spoke Robb. "How was the 'Rod Stack' hooked up for men when you left that part of the country, Mitch?"

"'Red Stack!'" butted in old Wollner. "Huh, it's a cinch your search-light of a face always points right," and he nervously laughed as he made another hot-box sizzle.

"It's wrong this time, though; better try the 'Narrow Escape,' boys. She's good for a job most any time," answered Mitch.

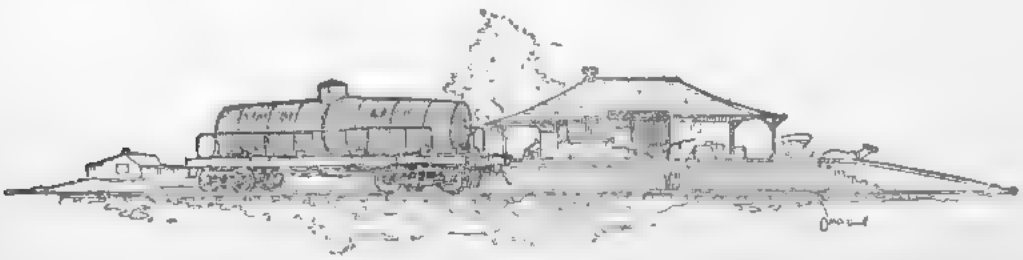
"All right, Sandy," and Dad's little eyes snapped. "If you ever fall down a well at night you just whistle and I'll get out of your way in a hurry. What'd you think of my whistle, anyway—like it?"

"Oh, it cut the mustard all right. It was all I heard, an' she was enough. But that Kid worried me more than anything else. Well, so long, men. If I had a parachute I'd lend her to you—might need one before you get in," and Mitch was off for the 50.

As Mitch headed his dinky train for the foot of Berneice Mountain, Dad's head man said, as he playfully took off the old engineer's cap to see if the iron-gray hair had turned white:

"That fellow's properly carded 'Sandy,' ain't he, old man?"

"Don't you get gay, youngster," and he grabbed for his cap. "Dig in an' pack some of these hot-boxes. We don't want to be here till next Chris'mas, do we?" With thoughts of the runaway, Sandy Mitch, a new home with a job on either the "Red Stack" or the "Narrow Escape," Dad slowly walked toward the 57.



EDDIE NEWTON, COMPOSER.

T. LAWRENCE SEIBERT, AUTHOR

"CASEY JONES."

The Variegated Versions of the Original of the Famous Railroad Classic About a Brave Engineer Who Got a "Bump."

BY PETER MULLIGAN.

SOME genius with a pastime for figures estimates that the old railroad song "Casey Jones"—perhaps the most popular song in America to-day among those who like lilt and humor in their music—has been rendered over ten million times. It is not on record how this genius made his estimate, but the chances are that he is somewhat short of the correct figure.

"Who was Casey Jones?" "How came he to be the hero of this toe-tingling melody?" "Where did the song originate?"

These questions have been hurled at the RAILROAD MAN'S MAGAZINE for more than two years.

The writer, in taking up the editor's burden to find out, asked a dozen men who should have known, and, in turn, he was told to "Ask Sweeney!"

Then he asked the authors of the song as it is known to-day. T. Lawrence Seibert wrote the words and Eddie Newton composed the music. These gentlemen state that they wrote "Casey Jones" from an old negro song.

"Nobody knows how many verses it had," the authors tell us, "and so near as we can trace it back, it started about an old engineer named John Luther Jones, better known from coast to coast as Casey Jones. He was born in Cayce, Kentucky, in 1863, and lived on a farm until he was nineteen years of age, then he went firing on the M. and O. Railroad, and later on the I. C.

"In 1890 he was promoted to engineer, which position he held until his death. He was transferred from Water Valley, Mississippi, and ran a freight-engine until he went on the Chicago and New Orleans Limited. On this run, at midnight, March 18, 1900, he was killed in a rear-end collision with a freight-train at Vaughans, Mississippi.

"This is his history, as near as we can trace it. We have searched back, and so far as we can learn, an old darky by the name of Wallace Saunders, working in a roundhouse, started the first of the Casey Jones song. We took the old song and made a new one from it, and to-day it is the greatest song hit that has ever been published. The song was two years old on April 1, 1911."

There is no doubt that Casey Jones has existed as a waif of the rails for many years, is the positive declaration of scores of old railroad men, and each has a separate and distinct version as to its origin and the occurrence which it is supposed to commemorate.

An S. P. Legend.

Along the Southern Pacific, in California and Nevada, there is a legend that Casey Jones, hero of the song, lies buried at the foot of the Reno Hill, so feelingly referred to, underneath the ruins of a "6-8 wheeler" which left the rails on that grade one night away back in the eighties.

It appears from the story that something did in reality "bump," and that the engineer, whose name was Casey Jones, was so effectively buried with his engine that the company did not think it worth while to disinter the remains of either.

This tale, however, is something on a par with the numerous lost-engine stories current throughout the West, and has a very hazy substance at best.

Casey Jones has been heard of so many times since that it is open to doubt whether he was really killed so early in his interesting career.

Living in Oakland, California.

In Oakland, California, Casey Jones resides in the flesh, at 754 Sixtieth Street, and runs a menial donkey-engine on the docks.

For twenty-five years Mr. Jones was an engineer on the Southern Pacific, much of the time running a pilot-engine up and down the slope of the Sierras.

He claims to be the original Casey Jones, in the sense that every hobo along the line, knowing him and his reputation for daredevil runs—"I'll run her till she leaves the rail," as the song narrates—made up the song and passed it along to the brakemen and switchmen, who whistled it in their cabs and shanties.

Casey Jones, of Oakland, admits that the plaintive wail has no foundation in fact, asserting that during his whole career he never had a serious accident, and never at any time figured particularly on taking "passage to the promised land."

Numerous other railway lines claim the honor of furnishing the original Casey Jones.

John Luther Jones.

Down on the Mobile and Ohio, John Luther Jones is remembered as a brave engineer. The record is that he pulled the New Orleans Limited for many years between Memphis and Canton, and finally lost his life when his engine collided with a freight-train at Vaughans, Mississippi, the night of March 18, 1900. It is asserted that the "bump" of that collision is the identical one referred to in the song now so popular, which, it is maintained, was first written by his negro fireman soon after the accident. This is as Messrs. Newton and Seibert state.

The fact that Casey Jones of the song, as it appears to-day, in his dying throes, expressed regret that he had never ridden the Southern Pacific or the Santa Fe is pointed to as proof that the accident in

reality took place on some system distant from those lines.

Casey is supposed to have been a nickname by which John Luther Jones was known to his associates.

The song written by the colored rimester, whose name is remembered as Wallace Saunders, contained a score or two of verses, after the manner of railroad and cowboy doggerel, the first stanza running as follows:

Through the South Memphis yards, on the fly,
Fireboy said, "You've got a white eye",
The switchman knew by the engine's moans
The man at the throttle was Casey Jones

page clipped

easy stages corrupted to Casey, and as Casey, Harrison Stacey Jones became known from Spokane to Bismarck. This is one of the original verses:

Through the Billings yards he let her rock,
Fireman yelled, "You've missed the block!"
Stacey said as he threw her wide
"In another minute we're going to glide"

There are many other railway systems still to be heard from, and doubtless each one will be able to produce a claimant for Casey Jones honors, with at least a color of title, thus tending to still further bewilder the seeker for information. If any man or woman can add to the list of Caseys the editor of the RAILROAD MAN'S

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MAGAZINE will be glad to have a letter on the subject.

Was "Casey" Jay Gould?

In a recent issue of the Kansas City *Times* there appears a letter signed "Kelly the Rake," and dated: "In Camp, Porum, Oklahoma."

Kelly the Rake says that he was one of the fathers of the song and it was written about Jay Gould.

> In beginning I would say that after a sudden and unsought-for exit from college when I was sixteen, and the ensuing wrath of my paternal ancestor, I took to the road, and since have sought adventure in the realms of the unemployed. In this connection I am enabled to give authoritative and authentic information about this mythical Casey Jones, inasmuch as I was one of the progenitors of the original song.
>
> Jay Gould, for reasons of economy, removed the platforms from the Missouri Pacific mail- and baggage-cars, thus eliminating a safe and comfortable means of transportation for "boes." A pal of mine, one Herkimer Hank, and myself were incited to some wrath by this action which resulted in the following effusion:
>
> Old Jay Gould said, before he died:
> "I'll fix the blind so the boes can't ride.
> If they ride, they will ride a rod,
> And place their life in the hands of God."
>
> This verse called for more, so we added the following:
>
> Old Jay Gould said, as he was about to die,
> "There's two more railroads I'd like to buy."
> We were wondering what they could be
> He said, "the New York Central and the Santa Fe."
>
> These verses were afterward added one by one. My repertoire holds about fifty verses about old Jay Gould
>
> And now for the Casey Jones part. Some years ago, on the Rock Island, between Herington and Kansas City, was a freight-engineer who was always good for a ride if we would heave coal. He said his name was James A. Michaels, and he was so known. He was a reckless runner, and verses began to be made to the tune of old Jay Gould. Here are six of them:
>
> Songs are sung about the heroes of old,
> I'll tell you of one that skins them cold.
> James A. Michaels was the eagle-eye's name,
> And when he died he died dead game.
>
> James A. Michaels was a brave engineer;
> He told the tallow-pot not to fear.
> Says he, "all you got to do is to keep her hot,
> And we'll make it in about four o'clock
>
> "Just grab the shovel and heave the coal;
> Put your head out the window and watch the drivers roll."
> Then he looked at his watch and mumbled and said,
> "We may make it, but we'll all be dead."
>
> They pulled out of ———— about forty minutes late,
> Dragging behind thirty-six cars of freight.
> The conductor didn't keep any tab,
> 'Cause James A. Michaels was in the cab.
>
> But when they got to the whistling-post,
> James turned as pale as any old ghost.
> He had the tallow-pot out on top,
> Helping the brakies to make the stop.
>
> The Cannon Ball come splitting the air.
> He threw her over and unloaded right there.
> He yelled to the fireman, "You'd better jump,
> 'Cause two locomotives is about to bump."
>
> These are verses chosen at random from among probably three hundred verses that I know.
>
> I believe the way the Casey Jones song was started was thus:
>
> A small coterie of us were flopped under a bean-tree in Arizona some time ago, singing this song. A guy asks if we would write some of it out. We did, and he said he was going to publish it. I think this is the real origin of the song.

Immortalized the 'Cine.

Recently a reader of this magazine sent the editor a clipping from *The Tennessean*, of Nashville, which published the following about the origin of Casey Jones, stating that the old negro who started the jingle is still alive:

> John Luther Jones was born at Cayce, Kentucky, in 1863, and spent his boyhood days on his father's Kentucky farm. At the age of nineteen he began firing a locomotive on the Mobile and Ohio Railroad, and later was similarly employed on the Illinois Central. In 1890 he was promoted to engineer, which position he held until death
>
> He was transferred from the Tennessee division of the Illinois Central to the Water Valley (Mississippi) division, and ran a freight-engine there until he became eligible to the Chicago and New Orleans limited, a fast passenger run. It was on this midnight run, March 18, 1900, that he lost his life in a rear-end collision with a freight-train at

Vaughans, Mississippi. By his amiable disposition and smiling face, as well as his reckless nature when at the throttle, he won hundreds of friends and admirers. When his engine entered a town the children knew the whistling of Casey Jones.

The song bearing his name was written and first sung by an old roundhouse negro named Wallace Saunders. By the merry jingle of the song it is evident that the author knew no trouble or sorrow, for he turns a house of grief into a gay carnival. The public has never heard even the smallest portion of the song, for, as time passed, verse after verse was added until, some claimed, there were at least fifty or seventy-five.

Casey Jones's home was only about ten miles from Fulton, Kentucky, the former home of the junior Firing Line man, and the above facts are known to be true. In a quiet little cottage in Cayce, Kentucky, there now lives the mother of Casey Jones, unless she has gone to her reward within the past few years. A heart-broken widow and little children mourn the loss of a husband and father of whom the world is to-day singing in gladsome tones.

As Mark Twain immortalized the steamboat, so has John Luther Jones immortalized the locomotive. The old darky who started the merry jingle on its mirth-making journey around the world to-day wields a shovel and wipes his engines, all unconscious of his responsibility for the greatest musical hit of the generation in which he lives. No one can sing this song with the feeling and understanding of a negro helper who knew the real Casey Jones

THE MADONNA.

BY ADELBERT CLARK.

Written for the "Railroad Man's Magazine."

SHE breathed a prayer as he slumbered·
"God make my little boy
To grow to a man of courage
And fill sad souls with joy"
He lay on her breast a rose-bud—
An opening flower of youth—
And she smiled and kissed him fondly,
"Make him a man of truth."

The years with their joys and sorrows
Passed as the fleet years do
With many a storm and tempest
And sunshine sifting through,
With eyes oft veiled with shadows,
And spirits weary, too,
And amid the storms and the sunshine,
The babe to manhood grew.

The mother had filled her mission,
And early sought her rest.
He folded the wasted fingers
Upon her pulseless breast
He bowed and he kissed her forehead
And then he turned away,
But the sunlight fell upon him—
Heaven was near that day

In the mountains the railroad bridges
Had all been swept away,
But a torch in the inky blackness
Had held the train at bay.
From under the wheels, all bleeding,
They brought him to the light
He died, but he saved five hundred
Souls from a wreck that night

'Twas Christmas night, and the people
Knelt down in fervent pray'r
They forgot the raging tempest,
The cold of the midnight air
For lo, the black clouds were riven
There in the mountains wild,
And they saw in the midst of heaven,
The Mother and her Child

Before deciding that you know it all, just imagine you had $5,000,000 with which to start a railroad. How far could you go?

SPIKE MALONE, AVIATOR

By John C. Russell

WINSLOW bound, the 1629 was rolling down the sixty-mile grade from Flagstaff with Spike Malone at the throttle and "Doc" Luke handling the firing valve. As she rounded the curve at Dennison, Spike reached for the whistle lever and sent a long, mellow blast echoing over the Red Desert.

"Red board!" called Luke, and the 1629 bellowed four times, impatient for a clear; but the board still holding, Spike shut off and pinched 'em down to a stop opposite the dingy red box car that served for a station. The operator popped out like a gopher from his hole and handed up the flimsy.

"Aw, thunderation!" drawled Spike. "Fourteen hours from Seligman and a feed, and now we're stuck here till Gawd knows when. Pearson's got the 1668 all over the carpet at Winslow west switch, and the yard's blocked. Us for the siding."

Safely into clear, the train-crew drifted up to the engine, where Spike and Luke were smoking their pipes in the shade of the hog.

Gazing at Fin McCool, the hind shack, Spike was moved to utterance.

"Fin," he remarked, "you're a pretty good scout if you ain't quite human; but every time I regards them ears of yours it reminds me of aeroplanes, and that's one trail I don't aim now at all to follow. Now, having provided the excuse, I'm going to unbosom myself of a yarn, so if you ain't agreeable you better beat it."

"Aeroplanes!" snorted Fin. "Phat next? For the love of Hivin, Spike, don't be after displaying your ignorance. What do you know about aeroplanes? Gwan wid ye!"

"Aw nix!" growled Spike. "You've got your signals mixed, Fin. If you savvied these here aeroplanes like little Spike, you wouldn't go making no breaks like that. Why, man, when it comes to those dinguses, I've learned the game from soda to hock I'm a bear-cat when it comes to aviating. Listen, and I'll unfold the tale, merely to convince you there's nothing to 'em, and not because I want to hear myself '*habla*.'

"Not so many years ago I'm firing oil out here on the desert, and, strange to relate, I gets canned. There's a pin-head clerk gets ingrowing memory and ups with a statement that I'm a repeater. Of course I protests strenuous, but E. J. G. attaches the hardware allee samee. 'No flagging goes here,' says he.

"Now, the Red Desert is just as necessary to me as furbelows to a female. I'm strong for it. Yes, sir, I'm sure a dyed-in-the-wool ha-sayampa! So, naturally, not wishing to vamose, I turn my attention to providing the eats. I allow, for a spell, I'll go back punching beef for old man Babbitt, though I don't like the notion a little bit when my opportunity blows into town.

"This opportunity is a professor person with a brand-new idea for one of these aeroplanes. He projects around verbally for some handy man to help him in constructing this here mechanical marvel of his. The little green devil that rides handy to my elbow nudges me and, says I to myself,

'Having tried my hand at most everything else, I may as well tackle this graft to wind up with'—so I volunteers.

"When I first see the professor I get a hunch, and to my dying day I'll wish I had trailed out after it. From 'way back in my yearling days I cherishes the impression that professors and similar all totes the same brands and earmarks.

"I judges a professor is sort of a cross between a politician and a hamfat tragedian counting the ties. My mind's eye deludes me with a picture of a tall, angular specimen, adorned with a rusty stovepipe hat, baggy clothes, and a ten days' scrub of beard. I'm fooled to death. My inventor is a little, stocky man in knee-bloomers and most scandalous outrageous stockings.

"But what takes my eye is his head. Red lights fade to an insignificant shimmer 'longside the color of his knob. Also, he's framed up with a cold, blue eye, numerous freckles, a pug nose, and an upper lip like a muley-cow. He answers to the name of Bryan, and his voice ain't yet outgrew a bit of the brogue. As I sees him my memory canters back to a saying of my old dad's.

"'Son,' he informs me once, 'whenever you run across a red-headed, pug-nosed, freckle-faced mick, with a lip like an apron and the fog of the bogs still in his voice, walk around him like he was a swamp. He's just a bundle of potential trouble.'

"Recalling the saying, I gets the hunch aforementioned, and right there little Spike ought to have made his break for safety. Yes, sir, my venerable old dad was sure correct. I've often wondered where my sire garnered this information.

"However, I take on with the professor, and him and me go to work in a big shed building this bird of his. Long as we work in the shed I'm fine and dandy; but when I think of the future and what it brings, I can see a large, blue, completed hunk of trouble on the horizon.

"Moreover, I find out the professor is an Irishman 'way shy on humor and, next to a homely woman, that's the mournfulest thing on earth. Nope, the professor don't take kindly to such little episodes as I endeavor to perpetuate in order to while away my leisure hours.

"He protests most emphatic, specially if I monkey 'round the machine. This machine of his is his darling and his dream, and he's always puttering 'round fixing of her. Oftentimes I've heard him projecting about the shed at most ungodly hours of the night. Naturally, as she nears finishing the professor waxes excited.

"The days stampeded by in much the same old style, and finally the professor and I roll her out of the shed for her trial spin. He climbs up into the seat with his face shining like the harvest moon, but little Spike stands pat with his number tens on solid ground.

"'Come in,' yells the professor. 'Up ind, ye, Spike, lad!'

"'Who, me?' says I. 'Not on your tintype! I renig! Go ahead, doc; you do the performance, and I'll play audience. Besides, you'll need somebody handy to identify you bimeby.'

"Say, you ought to heard him! Me intimating on his final end, that-a-way, gets his goat for fair, and he calls me everything he can lay his tongue to. There wa'n't a single respectable thing in it, either. Man, he sure had command of language! Cuss? Why, he soared up in flights of profanity till even I couldn't follow him, and I'm no rank amateur at that. He cussed so a cottonwood-tree a hundred yards away shed all its leaves, and he withered the sagebrush for a quarter of a mile all around us. He wound up by calling me a coward.

"'Whoa there,' says I, 'that's one word I won't take from no *hombre*, least of all off a little red-headed runt like you!' and I starts to climb up in the machine, aiming to push his face into the back of his neck.

"I hadn't more than got fairly off the ground when the professor shoved a lever, and the engine started off with a noise like an air-hammer. The dingus begins to tremble all over. I'm that scared I can't even let go and drop. The next I savvies the machine takes a little roll and a jump, and the ground starts to fall away from under me.

"Talk about a sensation! I'm scared stiff. The professor is tickled to death, though; and I can hear him, like it was in a dream, chortling and singing to himself.

"I manage to get up sand enough to crawl into the seat 'longside of him and take a grip on the arm-rest. I'll gamble, ten to one, no limit, that the prints of my fingers are in the wood yet.

"After a bit my nerve comes back, and I sit up and take notice. It ain't half bad sailing around in the air like a buzzard, and the professor is clear dippy with joy.

"'It's a success, Spike! Eureka! She

can't fail!' and similar expressions spout out of him like water out of a busted flue. And, sure 'nough, it looks to me like the professor has the situation by the tail. We spend over an hour circling round and round the town, and you can bet your stack

"My libations has just about struck their gait, and I begin to think scornful of aeroplanes. According to my makee savvy at the time, aeroplanes is no trick at all, and it's child's play to manage 'em.

"When that idea soaks in I'm going to

"NEATLY CANTED HER INTO THE WASHTUB."

to the sky that the inhabitants thereof has cricks in their necks for a week.

"Meanwhile, he instructs me a whole lot on managing the machine, though he don't let me take her none at all. Poco, presently we came snooping back to the shed, lands as easy as old Bill Ensign absorbs the contents from a bottle, and rolls the machine into the shed.

"Subsequently I'm strolling down-town when I notice a wabbling in my legs that causes uneasiness, so I prowls into Kelly's thirst-emporium for a tonic.

"One was lonesome and called for two, and—oh, well, you know how it is! Pretty soon I was the grand panjandrum, with the little round button on top. Meandering into the street, I wended my way I knew not whither. The next lucid fact I'm cognizant of is standing in the shed sizing up the aeroplane. Enter a forty horse-power, triple-cylinder jinx, and the hoodoo begins.

run this one or bust, so I rolls her out of the shed.

"Having started the engines several times prior, I don't have any trouble getting 'em going, and I then crawls into the seat. 'Now,' says I, 'here's where I go the professor one better. I'm sure the boss aviator and I'll make him feel like the deuce of spades when he sees me.' Alas!

"Remembering the Johnson bar the professor shoves when he interrupts those cuss-engendered ideas of vengeance of mine a while back, I horses her down in the corner and we started on our career. The dingus started on a gentle roll, gave a little hop, and lit out into the air.

"There was a wheel forninst me like the wheel of an auto. I have a hazy recollection of the professor saying it warped the wing surfaces and caused her to sheer in either direction, so I give it a whirl for luck.

"*Woosh!* we take a swoop to the right!

"Right 'longside me is one of these here gyroscopes that does the automatic balancing, and I try to reach it to see what for a snarey it is. Ain't I glad now I couldn't reach it?

"By this time the town is wise, and as I'm circling round the burg I can see my erstwhile fellow citizens doing 'the-Reuben-come-to-town' stunt. Also, there's the professor, and, judging from his actions, he's sure some agitated. Observing this and remembering his lack of humor, I foresee he won't regard this episode in the light of a joke, so I gives the steering-wheel a turn, aiming to get out of town before he goes gunning for me, and something snaps. Right there the aeroplane takes charge.

"Man—oh, man! The didoes she cut would have turned Steamboat, the Cheyenne bucker, green with envy! She'd rock from side to side like a boat, and then take to bucking like a wall-eyed pinto. Ever and anon she'd play puppy and chase her tail a spell. Seasick? Nothing to it! I sobers up in a hurry between sick and scare. We're going high, wide, and handsome, sporting around in a care-free way.

"But the dingus soon tired of this. It must have inherited some of the Irish irresponsibility from its maker; but I'll swear it had a well-developed sense of humor, if he didn't. Having heretofore conducted ourselves in a perfectly decent manner, we now start out to see how much ruction we can raise.

"Being over old man French's ranch-house, we shot down and hustled his staid, old cow through the garden fence and went on into the back yard, where we stripped the family washing from the line. Of course, out rushed the family to make observation; and, by way of adding insult to injury, we shied up over the house, knocking the chimney to pieces and rained bricks on their heads.

"Having stirred up quite a satisfactory fracas, we headed for town. Looking back, I see old man French astride a buckskin coming after me. He has his old Sharps eight-square rifle in his hand, and there's a blue cloud following him.

"I foresee complications. Old Mrs. Haydock is driving to town when the dingus sailed over her head, and she lit out of the rig with a lurid squall and beat it for cover. The last I see of her is a whirl of black dress and flying white stockings as she scuttles over a rise.

"Mrs. Buttner was hanging clothes on her line when the dingus visited her back yard, hit her amidships, and neatly canted her into the washtub. To make the job complete, it tore the clothes-line loose and bore it away in its teeth, so to speak. Circling back over the shops, we managed to rip down about all the telegraph-wires, and so tied up the system for near an hour.

"The dingus still had a new maneuver up its sleeve, and we headed for Chilitown, the Mexican quarter. The wickiups they herd in over there are dried mud and willow wattle, and we managed to unroof about six of 'em.

"Continuing on our course, we headed for the bluff surrounding the town. On one of them, old Johnny-Hit-the-Bottle, a local Piute chief, had pitched his teepee. With one last, expiring gasp the dingus deliberately uprooted it, exposing old Johnny and his horror-stricken family to the light of day. Then it gently dug its nose into the ground. My ride was over.

"First off, I see old Johnny saying his prayers with speed and earnestness. What thought hit him, I pass up; but, judging from his expression, I reckon he allowed his Manitou had sure come for him.

"My eye happening to wander townward, I see a sight that starts me going. Here comes Ben Buttner and old man French, neck and neck, with the professor about two whoops and a holler to the rear. Following him was every able-bodied citizen of the burg, not counting dogs, chinks, and Mexicans.

"They seemed in a hurry and acted uncommon earnest, so I grabs one of old Johnny's ponies and hiked out for parts unknown as long as they was a good way off. I managed to make Moqui, and caught Al Heyward pulling out of the siding. Al carried me to Ash Fork, where I made tracks for Phœnix.

"Moreover, lads, 'twas a good many moons before I hit Winslow town again. Even now Mrs Buttner passes by on the other side of the way, and whenever Ben and I meet we puts our noses up in the air and concocts snoots at each other. Also, no more aeroplaning for mine. When a loco runs away there's always the brake to snub her up with, and aeroplanes is shy brakes a whole lot. A Jasper can join the birds from an engine-cab and stand a chance of coming clean, but the fool who tried that stunt from a flying-machine wouldn't even look natural."

Observations of a Country Station Agent

No. 43

By J. E. Smith

WE have in our little towns and country centers a type of old men who are absolved from daily toil, and who buzz about in reminiscence and philosophy wherever there is an ear to listen. Artists like Frost have caught him. They have assembled him and his kind around the roaring stove in the cracker barrel grocery, and they have adorned him with a huge tin star, conspicuous and presumptuous in authority, as the district constable.

It is not a fancy type. The unemployed old man with fancies and vagaries is with us every day, nor is he always sweetly disposed or charitable in his reflections, nor kindly in his bent.

He is often cantankerous and irascible, and as full of whims and idiosyncrasies as a child. He frequently denies us the veneration that we feel is due the mellowness of old age

It was the lot of the writer to live many years in a little village where life was slow and easy, where there was no ambition for youth, no particular activity for middle age, but the ideal place for repose and peace for the aged. He learned that old age does not always want repose and peace. From the vantage of years it wants to protest and object, and it wants the entire procession coming on to halt and listen.

It is always ready with explanation and remedy. It has glory for the past and lamentation for the future, and it wants to be heard and heeded. Whereupon, the artist with pencil and brush draws a picture of an aged type, and there is a ripple of merriment and approval the world round.

These pictures have a certain uniformity as to chin-whiskers and beaked noses. They usually show the neck adorned with a white collar or a comforter.

The loitering old man of the Middle West does not exactly conform to this type. He either shaves weekly or fortnightly, or is wildly and luxuriantly upholstered. The bathing is perhaps oftener than total eclipses, but the white collar and necktie—nix. Nearly every colored shirt has its own collar of its own hue and livery, or no collar at all, and it goes at that.

These old men have their hobbies.

Some are strong in scriptural argument. Some watch the government narrowly, disgusted with the brand of modern statesmanship and recalling the glories and

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achievements of "Jim" Buchanan. Some bewail the comradeship of the times, and lament the passing of that pioneer sociability where the whole community slept in one room and ate from one bowl.

They tell the old stories and the old experiences over and over, forgetting a little and adding a little until they are foozled in the telling, and the narrative becomes muddled and unintelligible.

Of this type was Grandpap Williams, whose favorite reminiscences were on the line of "narrow escapes"—where if he had not turned this way or that, or had not hesitated that particular instant, he would have been crushed, mutilated, shot, butchered, or obliterated.

But always by a hairbreadth turn an awful fate was circumvented and the judgment of destiny was side-stepped.

Grandpap believed in thrillers. It did him great good to have you listen open-mouthed and let out a few exclamations of wonderment when he climaxed a close shave.

When it came to "Well, I declare!" "Is it possible?" "Do say!" Grandpap was the real package for interrogation-humps and exclamation-points.

Grandpap's repertoire had one railroad story. When I located within his circle he lost no time in passing it to me.

"It was like this," reiterated grandpap. "I was walkin' down the main track, and along comes a freight-train. I steps off on the long side track, you know, an' *biff!* something takes me in the back. I remember falling. I jist had a faint idee of landin' on my head. I didn't have time to recall anything much, only that I was killed

"Now, that's what I call Providence. I wasn't killed. You can see for yourself. When I got up the first thought was, have I got my legs? I took a quick look, and there they was. Then I took a look at my hands, and then I felt of my head. I was all assembled.

"By that time the section-foreman and the hands reached me and steadied me and brushed me off. It was this way. I had been hit by a push-car loaded with ties they was a shovin' along ahead of the hand-car. I had stepped right in front of them, but I was goin' with a sidewise motion, you see, from the main track to the side track.

"The momentum carried me over into the ditch. One second later I would have been motionless, and the car would have knocked me down and run over me. If I hadn't 'a' been one foot beyond the center of the track I would have fallen on the rail and been run over. They was fifty ties on the car. They weigh over a hundred pounds apiece—don't they? That's more'n three tons besides the car. I didn't see 'em comin' down the side track. All I noticed was the freight-train on the main track. What saved my life was one second of time and a half a step. That's what I call a narrow escape."

Grandpap expected us to audibly marvel.

A little old man who heard the narrative injected the irreverent observation that being hit by a hand-car wasn't anything to brag about. He ventured the opinion that "lots of people get pushed off the track by hand-cars."

"Pushed!" yelled grandpap, taking sudden umbrage. "Pushed! Who said pushed? I was knocked down. I fell in the ditch, sir. That was all that saved my life. Just the bat of an eye or the turn of a hair, sir, and I would have been run over. Crushed and killed, sir."

"Crushed under a hand-car," laughed the little old man with a poo-hoo inflection.

"Loaded with ties!" interjected grandpap. "Fifty ties—think of them!"

"If you had had my experience you might talk," said the little old man with a deprecating air. "It brings to my mind a similar experience. I was walking along a side track—one of them lap-sidings, understand, and a push-car loomed up before me, going at a terrific rate of speed. Loaded with ties, too. Seven stout section-men behind it. I gave a sudden jump—just like you. Didn't stop to reason. I should have impelled myself to the left and off the right-of-way, but I went the other way and into the middle of the running track, when *biff!* I revolved three times in mid air and glided off into space."

The little old man stopped and drew a heavy breath. Grandpap swapped his quid from left to right and chewed hard.

"Hit, sir," suddenly exploded the little old man, "with one of them compound-cylinder engines with a water capacity of nine thousand gallons, fifty-seven-inch drive-wheels—working pressure two hundred pounds to the square inch! Engine and tender together, five hundred and ninety-six thousand pounds. When any one talks about being hit by a little old push-car it makes me tired."

Grandpap shot one of those Lexington-

Concord looks at the little old man and moved off without any further comment.

"Hold on!" cried the little old man.

Grandpap stopped.

"If it hadn't 'a' been for the momentum of that side-step, or if I had been one second later, I'd 'a' been ground to pieces. not killed. Lots o' people thinks there's a big lot of glory in being between the two where there is only a hair either way."

I never saw the little old man again, and grandpap never recovered his nerve, as he never came to me again with the story of the push-car and the fifty ties, as he had so triumphantly recited it before.

But the country type of old men is not always querulous and boresome.

AUNT BETTY WOULD APPLY THAT MARVELOUSLY EFFICIENT COMBINATION OF SOFT WATER, LYE-SOAP, AND A RAG.

There's another time I want to tell you about. When that coach on the X and X road went through the bridge, and every passenger in it killed. Suppose I had been going to New York at that time, and had been on that train, and in that coach? I would have been a dead one. But I escaped, and why? Just because I did not take that train and coach for New York. But see what a close shave it was!"

Grandpap seemed to lose interest and moved off. The little old man followed him and shouted of another rail horror of the far West from which he miraculously escaped by being east of the Mississippi River at the time. The little old man gave up the chase and returned to me.

"I hate a liar," said he, glaring at me as if I were *particeps criminis* in grandpap's story. "Particularly an old liar. Especially them that always have things happen just about, but not quite. If a man's killed, he's killed. If he's not killed, he's

I found an old friend in the little town where I was agent and operator, whom I shall always remember with regard and affection. He was another quality. He deserves this spot in railroad literature, for he was a rare railroader in sympathy and by proxy, with a name that never adorned a pay-roll.

He owned a small farm south of town, and as he was beyond the age of hard work, and neither a great reader nor student, he had not much to occupy his time or claim his attention.

He was familiarly known as "Uncle Johnny." He was of the kindly order of old men, open-handed in his hospitality, and devoid of evil impulses and rancor.

He did not talk a great deal. He hadn't

the fund of hairbreadths that grandpap had, but he had the usual keen interest in what had taken place the generation before.

He told me he had lived fifty years on the little farm south of the station. He was there when they built the road and contributed the right-of-way through his farm. He thought that every man who owned land owed a little debt to the railroads for the part they played in developing the country and adding value to the land.

He had no hostility, but believed railroads should be encouraged, and that the railroad and the agriculturist had much in common. Which, all in all, is rather a whole-hearted view for a farmer to take.

Uncle Johnny called at the depot frequently in an aimless sort of way.

He was usually the first to scan any new railroad-map or picture hung up in the waiting-room. Whenever an attractive folder or a bit of fancy railroad advertising came to hand I supplied Uncle Johnny with copies. I gave him many advertising knickknacks that came to me from other roads, such as paper-cutters, rulers, matchboxes, *et cetera*.

I think Uncle Johnny was about seventy years of age when he became a regular employee of the railroad.

It is not often that a man of seventy lands a regular job on a railroad. Uncle Johnny's case is exceptional. At that time on our road the dead-line was thirty-five. Uncle Johnny went them one better by doubling the figures and entering.

Both the vital points we kept secret. One that he was seventy; the other that he was a railroad employee.

His name never appeared on the pay-roll. He never drew a cent for his services, but he remained a faithful employee until the illness that took him to his final reward, which was a number of years later.

Uncle Johnny slipped into the service as a switch-light tender.

The south switch of the long-passing track was near Uncle Johnny's house.

The old gentleman had the habit of coming to the village every afternoon. From the post-office he would come to the depot. Early in the evening he would return home down the track.

On a particular visit he observed that we had to carry a switch-light out to the south switch every evening, and he volunteered to take it out for us and put it up.

We let him have it. A station-man will sublet a contract of that kind to anybody, anywhere, at any time. When it comes to switch-lamps and United States mail-bags, you only have to say to an agent or helper, "May I?" and you may.

There was no arrangement or agreement with Uncle Johnny. Every evening he dropped into the office, sat around a little while, exchanged a few words, picked up the lamp, and drilled out home.

After a time I thought to turn over to him an afternoon paper that I had looked over, so that he came to depend on me for his reading-matter, and I on him for the care of the south light.

There never was a day too hot, too cold, too rainy, or too blizzardy for Uncle Johnny to fail in his duty of putting up the switch-light. Every night before going to bed he would take the precaution to peep out to see that the signal showed clear. When the light became clouded he would take the lamp to the house, and Aunt Betty would apply that marvelously efficient combination of soft water, lye-soap, and a rag until the lens shone like a lighthouse.

It was not a great while before Uncle Johnny felt the importance of his connection with the railroad and the responsibility of his position.

With added zest he waved his hand at passing engineers, invariably dropping his work to watch the trains go by. A strange whistle, a new engine, a special, an extra, or anything out of the regular schedule, aroused a quick curiosity and brought forth eager inquiries when he reported at the depot in the evening.

He rejoiced with us when business was good. He was depressed in periods of slump and stagnation. He was always greatly interested in my monthly comparative statements. He was especially eager about the passenger receipts.

Our ticket sales ran about ten dollars per day, or three hundred dollars per month. To Uncle Johnny this seemed like a vast revenue, a magnificent steady income. Ten dollars every day! And as the trains had to run every day, anyhow, that was all clear gain.

The freight tonnage and our proportion therefrom presented certain mathematical complexities that Uncle Johnny could not readily grasp, whereas, so many passengers and so much money were simple propositions that caught his interest.

On the first day of every month he was

IF A DISSENTING VOICE WAS RAISED AGAINST THE TIME OF A TRAIN, UNCLE JOHNNY WOULD EXPLAIN WHY IT COULD NOT BE OTHERWISE.

on hand to know what the sales totaled and how they compared with the same month the year previous. Uncle Johnny had the impression the railroad officials were watching our station with special scrutiny. When an increase appeared he shared my elation.

Whenever the wreck-train passed, Uncle Johnny dropped everything on the farm and bee-lined it to the depot. Whenever there was a rumor of a railroad accident he came direct to me for all the information, and I put myself out to see that he got the correct dope.

When a change of passenger-train schedule is to take place, whispers of it reach the little way-stations and create wide-spread interest and curiosity.

People who never buy a ticket, but confine their travel to the ten-mile radius within the limitations of the family nag, comment and criticize a new schedule very freely.

They are quick to note that their village is ignored, and marvel that the railroad cannot see that if the trains arrived and departed from Flatbrush at certain hours morning, noon, and evening, a great increase in travel would result.

It never occurs that there are other stations on the same hundred-mile division, and that there are such things as terminal and intermediate connections.

Uncle Johnny defended the railroad in any schedule it saw fit to put in effect. In blacksmith shop, general-store, or along the public highway, if a dissenting voice was raised against the time of a train, Uncle Johnny would explain why it could not be otherwise.

There are some nights every winter when the snow drifts and banks, and a section-man must face the swirl and bite of Boreas and sweep the switches and keep them clean so they can be used.

On these wild nights Uncle Johnny always left a light burning brightly at the kitchen-window, a fire in the kitchen-stove, and a pot of coffee steaming its fragrance

and offering its cheer to the lonely section-man doing vigil at the switch.

A great many little things puzzled Uncle Johnny, about which he questioned me with the curiosity of a child.

"Take that curve down by my place," reasoned he. "Now the outside-rail distance is longer than the inside, isn't it?"

"I think not," I argued. "They are parallel. One line is exactly the same length as the other. They both make the same curve and must be the same."

"Then if the curve continued until the track made the complete circle, the inside circle would be just the same distance around as the outside one, eh? Is that the way you figure? A curve is part of a circle, you know. What is true of all is true of a part. Take an engine—both drivers turn on the same axle—if the outside rail is farther around than the inside, how can both wheels make the same revolutions and get around with it?"

Uncle Johnny shot a triumphant glance in my direction, while I slid over to the key to answer my call.

"Maybe you can tell me why the inside rail of a curve is always battered up? Looks to me like a train swerving to the outside would throw most of the weight and wear on the outside rail. But it is the inside rail that batters. I have never been able to figure that out."

"I cannot explain it," said I. "It's a little out of my line."

"Maybe you can tell me why the telegraph wires sing some days and don't others. Some days I can hear them as I walk along the track. I used to think it was the news goin' over, but you say it ain't that. Do you know, I have sat down opposite a pole and listened to the buzzing, high and low, loud and softlike, and I've wondered what caused it."

I explained to Uncle Johnny that weather conditions made the wires sing, but I did not know the reason. I have never heard it explained.

"There is another thing," said Uncle Johnny, "why don't lightning strike a railroad-car or engine? I have never heard of such a thing; have you?"

I confessed that I had never known of an instance where lightning played any pranks with railroad rolling-stock. It is, however, a very common thing for telegraph poles along the right-of-way to be shattered, so I jumped at this question with an explanation that the electric-charged wires drew the electric discharge from the clouds, thereby protecting the engines, cars, and buildings near by.

Uncle Johnny was much concerned over the diminishing timber supply of the country, and talked to me a great many times about the problem confronting the railroads when white oak is no longer available for ties and timbers.

He thought he would turn his attention to the invention of a steel tie. I assured him the genius who found a steel tie meeting all requirements would soon be in the Carnegie list.

He also thought a switch could be invented that would always be automatically correct. I advised him to consult the section foreman on these propositions. I do not think he ever got very far with either of them.

Uncle Johnny soon developed a loyalty to the railroad that would have been a credit to any employee drawing real money for his work.

In politics he had never wearied or wavered. He had always taken it straight. One night his party's candidate made a speech in the school-house. Uncle Johnny was present.

It was an agricultural gathering. The itching-for-office orator, playing it safe, lit onto the railroads. The railroad has always been the real actopusarino of the wind-jamming politician.

He spilled a few words about the high intelligence of his hearers and their eagerness for truth on the issues before the people, then taking a few javelins in one hand and a harpoon in the other, he went after the railroads in a perfervid onslaught.

For a while Uncle Johnny shifted about uneasily, then he suddenly bobbed up to a point of order.

The orator paused.

"It don't suit me," blustered Uncle Johnny. "What would this country be if it wasn't for railroads? What would my farm be worth if this railroad didn't run right where it does? We got to live and let live."

By this time Uncle Johnny was waving his arms.

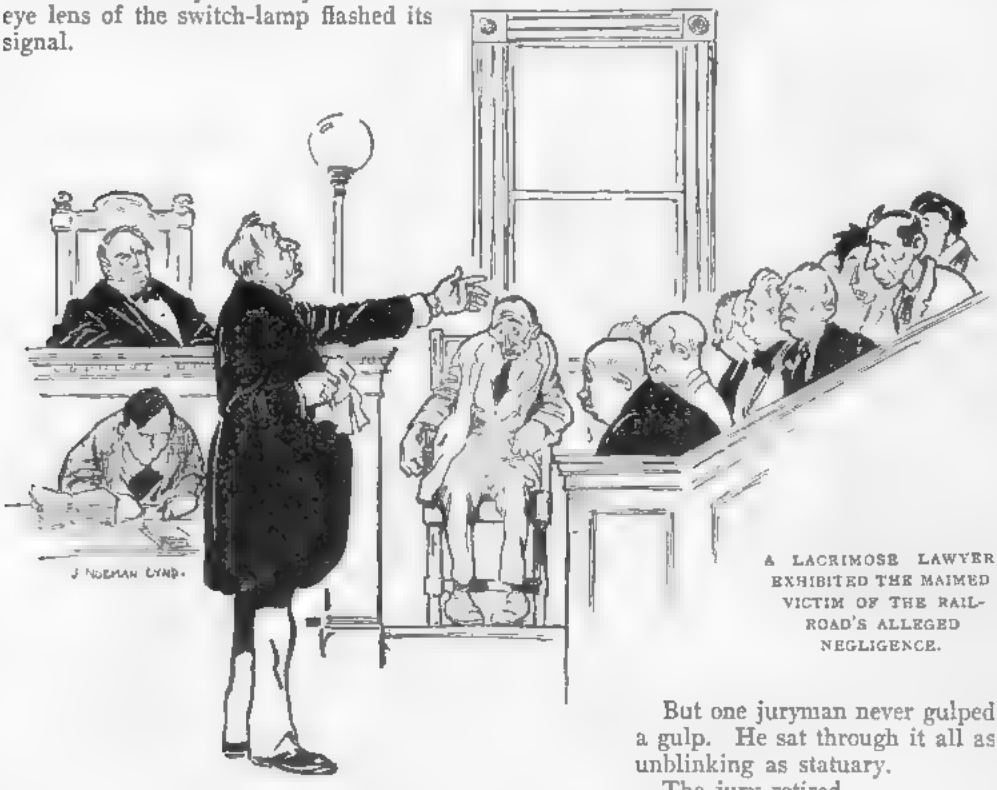
"It's a lot of rot. Durned tomfoolery to get votes," he shouted. "There ain't anything done as much for us as the railroads have, and they ought to have a square deal!"

Uncle Johnny grabbed his hat and made for the door.

"It makes me tired," he shouted as a parting shot. "Any one that bellyaches about railroads as you do is either a fool or a demagogue!"

Exit Uncle Johnny into the night and down the track for home, head up and stepping hard, but pausing at the south switch to note how clearly and fully the bull's-eye lens of the switch-lamp flashed its signal.

A lacrimose lawyer exhibited the maimed victim of the railroad's alleged negligence. Eleven jurors swallowed hard and moistened their handkerchiefs as the plaintiff's counsel recited the details of the outrage whereby his client, maimed in arm and leg and crimped in back, would continue in life handicapped and disconsolate. He drew a pathetic picture.



A LACRIMOSE LAWYER EXHIBITED THE MAIMED VICTIM OF THE RAILROAD'S ALLEGED NEGLIGENCE.

But one juryman never gulped a gulp. He sat through it all as unblinking as statuary.

The jury retired.

As for the orator, he nimbly shifted to the tariff, where every squawker is safe, and passed off the interruption with lightness and levity.

Nevertheless, the wire-pullers and bellwethers did their best to line up Uncle Johnny again, to conciliate him and have him remain steadfast and regular to the ticket, but without success.

He bolted the ticket. He was insurgent No. 1. He was a railroader of class and character, loyal and true to his calling. He resented the candidate's attack on railroads, and with genuine consistency voted against him.

At another time we were sued for heavy damages by a party hit on a crossing. The case was tried before a jury.

The lawyer with a loose-leaf tongue lit a cigar, put his feet on the railing and said he would wait a few minutes for the verdict.

The plaintiff was chirp and cheerful, having lost the air of utter disconsolation and abject helplessness as soon as the jury left the court-room. He arose, stretched, walked over to his lawyer, and slapped him on the back, all apparently without lost motion or mechanical defect.

But the cigar burned out. The feet, at length, came off the railing. Evening came on, then night, and the next morning—and no verdict.

It became noised about that one juryman was holding out. In the afternoon the verdict of a disagreement was returned.

One man of the twelve found for the

railroad and he never budged a hair-breadth. The manufactured testimony of how careless the engineer was did not go down with him. He pitted his own observations against it. For years he had watched every engineer that went by, had heard every crossing toot, and they could not convince him by the testimony of incidental witnesses who had never made it a specialty that any engineer could be so rank as they sought to show in this case.

This was the judgment of Uncle Johnny, the lone juror, and he stood pat.

calmly looked the situation over. He walked over to the bellicose citizen, took the gun away from him, and ordered the section-men to go ahead with their work.

A little nerve was needed. Uncle Johnny was the only railroader on the spot that had it. Deprived of his artillery, the citizen shook his fist, hurled a few profane threats, and hiked for a lawyer and an injunction.

In the meantime the switch was completed, and possession is nine-tenths, even with a railroad.

I had a message one morning from the

THEY WERE UNCLE JOHNNY'S TWO GRANDSONS!

One day we assembled our section gangs to extend a siding. A property owner objected. He was pugnacious and offensive. He stopped the work by armed intervention. With a gun and loud talk he overawed the gang of laborers, and the foreman did not know what to do.

The citizen patrolled the spot cursing and threatening at every turn. The section-men rested on their shovels and picks, then retreated behind a barricade of ties. Work came to a sudden halt in the disputed territory. For a bit it looked like Haymarket or Homestead.

Then along happened Uncle Johnny and

superintendent that the south switch-lamp was not burning in the night, and to explain why.

It was burning when Uncle Johnny put it up in the evening and on the following morning; why should it be reported out in the night? Neither of us could understand.

A few nights later we had the same experience. Lamp burning morning and evening, but out in the night.

Uncle Johnny was distressed and perplexed. We could make no explanation, and we hadn't much in way of theory.

For the third time we had the same report. This time it was accompanied by the sharp

reminder that this was complaint No. 3, and that it must be the last.

"Leave it to me," exclaimed Uncle Johnny warmly. "Somebody's fooling with that lamp. I'll get 'em."

I very willingly delegated the Sherlock end of the affair to my able assistant.

A hurried pounding on my door a few nights later brought me out of bed.

Uncle Johnny was outside in a state of suppressed excitement.

"We can get 'em. Come on with me," he urged. I dressed and followed him.

"I've laid for 'em for three nights," he explained as we went along. "They didn't see me. They don't know I was watching. They came up from the orchard, slid over the fence, took the switch-lamp off the forks, and went back through the orchard toward the creek. There's two of them. My eyes ain't the best, and I couldn't make out whether they were men or boys"

I did not particularly hanker for the job of running down burglars or midnight marauders, but I could not well escape Uncle Johnny's earnestness and enthusiasm.

We made our way to the south switch and hung about for a time.

Presently we caught the glimmer of a light some distance away, and we decided to slip over where it was. The trail led us through the orchard to the creek.

We made our way without attracting any attention, and came up unexpectedly on Camp A of the old order of boy scouts.

There were five of them ranging from fifteen to eighteen years of age. They were grilling a goose over a concealed fire. For side dishes there were apples, a melon, and other delicacies purloined from Uncle Johnny's farm.

I raised an admonishing hand and whispered caution, but Uncle Johnny with one bound lit in the center of the camp, and grasped a culprit in each hand.

I made a dash for the other members, but they were too fleet for me.

I flashed the bull's-eye switch-lamp fairly in the faces of the squirming youngsters.

They were Uncle Johnny's two grandsons! They walked back with us and restored the switch-lamp. They did not appear penitent or anxious about their fate.

I asked them why they took the lamp

They replied that they had to have it to select the provisions for the barbecue.

I explained to them that misplacing a railroad-signal was a serious offense and might result in a great disaster. They had not thought of it in that way.

Uncle Johnny dwelt on the moral and legal aspect of the case at great length. I think we impressed the boys deeply, for after a particularly lugubrious forecast, followed by an impressive silence for proper percolation, one of them spoke up.

"We are baking a goose down at the dugout, and we're afraid it will burn. Can't we go back and look after it? And won't you go with us? Come on, grandpa!"

Full of sage advice and admonition for the wicked, Uncle Johnny and I went back to the camp with the juvenile desperadoes and partook of the barbecue.

The banquet had the past-midnight flavor, the savor of the witching hour, the relish of that which we get slyly and which must be prepared and partaken of cautiously where watchfulness sharpens the zest.

"I don't know what ought to be done," said Uncle Johnny next day. "Suppose they ought to be reported to the grand jury."

"For taking a goose?" I asked.

"No, no, no!" protested Uncle Johnny, "for taking the switch-lamp."

"I do not think they will do that again," I replied. "Anyway, let's give them another show."

"I didn't think my grandsons would do anything like that," said he regretfully.

Uncle Johnny has passed to his reward—to the bourn where all good and faithful railroad men must finally report.

By birth and instinct he was a real railroader, and he never lost interest in the stirring game. He never shirked duty, and he never drew a cent of pay.

On the center-table of that solemn and sacred room which in a country home is known as the "parlor," were an album, the family Bible, and an official railroad guide which I had given him a long time before. On the wall in the frame where once there was the picture of Washington crossing the Delaware there now appeared a map of our line lifted from one of our folders.

They showed me his watch, silver-case and open-faced, but on the back there was a railroad engine heavily engraved. It was an expensive timepiece, a chronometer with compensation balance, properly jeweled and standard on any railroad.

He was an old-man character type of his own making. I rejoice in the opportunity to give him these few pages in the literature of the rail. Peace to his ashes.

The STONE in the SWITCH

By H. M. Lome

PART I.

THE new freight-line proved to be a winner from the day that the first string of flats crawled out from Foundryville, its southerly terminus, on their way to Millswood, about 120 miles to the northward, where the right-of-way ended.

Then the Middle States, Western and Lakes Railroad scratched its head and wondered why in cinders it hadn't built the line before.

Why not, indeed? It had opened a section of country that had been shut off from the hustling, bustling world; that was dotted with infrequent farms known only to a few city folk who kept the knowledge to themselves, lest the beautiful region become "popular" and the farm folk lose their simplicity and put up their prices.

The farmers were obliged to haul their products a score or more miles before they could ship them by rail to market, and the valleys in which the farms were situated were flanked by mountains of quite respectable height, wooded and gullied, and laced with streams in which were abundant trout—lively, fighting chaps that get their strength and pluck from constant wrestling with rushing water.

These mountains were a continuation of the chain that ran to the westward and was filled with minerals of the staple sort—coal, iron, and copper. Surveys of mineralogists had proven that the new territory was equally rich in similar natural resources. One iron-mine on Ohchakina Hill had panned out in great shape, but had been abandoned because the one-time methods of transportation of the ore ate up the profits.

Representations had been made to the M. S., W. and L. by mining capitalists who were anxious to tap the territory, and the construction of the line followed.

Simultaneously, there was started the Middle Mountain Iron Company and the Thunder Creek Coal and Iron Company.

Two other mining corporations proposed operating some ten miles east of the freight-line provided that feeding lines could be built from the former to the properties, and thus it was that Simon Leadby, one of the surveyors of the road, came to be on the ground for the purpose of looking things over

He and his helpers boarded on a farm adjacent to the mouth of the narrow valley that led up to the site of the mines that were to be; and the farm as well as the little depot of the freight-line were named Sweet Brook.

It was to this depot that the farmers were learning to bring their products for shipment to Foundryville and other points; for, with the opening of the line, the middlemen had descended on them, and there had been dinners and speech-making and signing of contracts, and business started with a glorious rush.

John Marble from "out beyond," as the inhabitants of the region called all parts of the world not included in their valleys and hills, had been given charge of the depot from the first.

A quaint, upright, and lovable people

were they among whom he found himself thrown. Descendants of Dutch colonists and Pennsylvanian Quakers and a sprinkling of Scotchmen—did you ever know any corner of this earth where there wasn't a Scotchman?

All were farmers; most of the men were mighty hunters, and every one of the women knitted hose and mittens and shawls.

With Marble came his daughter Mary. There was little in common between father and child in looks or manners. He was dark, silent, and stern-faced. Good father as he was, he talked but little to his daughter and less to outsiders.

The few folk who lived round about were neighborly, given to flocking together in the evenings, the men smoking and checker-playing, the women knitting and chatting, but the depot master held himself aloof from these gatherings, although he encouraged Mary taking part in them.

"It's dad's way," the girl would declare. "Where we came from in the East, people told me that he'd been that way ever since mother died, and that was when I was a very little thing. Dad's all right in every way."

And loyal daughter that she was, she would look at the others with a smiling challenge in her eyes.

Mary was a fair-haired, blue-eyed maiden, having dimples in her cheeks and elbows, a lissom form, and an ever-pleasant word or flash of raillery.

Mary "smilingly put the question by" whenever any of her many admirers "popped." She made friends where she caused sore hearts—and she told it all to Harry.

Nothwithstanding Mary's attitude, there was a "particular" young man. He happened to be Harry Hale, the conductor on one of the two freight-trains that made the distance between the two terminals every twenty-four hours.

Hale was a well-built, good-looking, manly sort of chap, steady and given to study when he wasn't in the dog-house or the neighborhood of Sweet Brook. He had fallen head over heels in love with Mary the moment that she had put in an appearance at the out-of-the-way station in the secluded Pennsylvania valley.

The girl, after keeping him on tenter-hooks for a couple of weeks — as is the privilege of her sex — finally promised to become Mrs. Hale as soon as he got his next promotion.

Marble and his daughter lived in a small house just behind the depot, that had been built by the company. It was a cozy place, having a truck-patch at one side and a flower-garden at the other.

The garden was tended by Mary, and the blossoms that it bore were many and fragrant. Harry had declared that the rose-bushes and syringas and other flowering things knew Mary and did their best to show their gratitude by bearing abundantly.

When he told her this, she called him an "old silly," and pinned a moss-rose in his buttonhole—for she had one moss-rose bush, the buds of which she kept exclusively for her dad, Harry, and old Mrs. Van Huysen, who was bedridden.

As for the truck-patch, it was one more in name than fact, for Mary's farmer admirers kept her so well stocked in vegetables that there was really no need for their cultivation.

So matters stood when Leadby and his chainmen and assistants arrived at Sweet Brook. He wasn't a particularly taking sort of individual, being sallow, with small eyes set too closely together, and a nasty, sneering, determined mouth.

He gave the impression that he looked on his fellow men as liars, for he had a way of listening to what you had to say with a suspicious expression on his face. When you finished, he would pause before he replied, and when he did open his ugly lips there was a touch of doubt in his speech. In all else, too, that he said or did, there seemed to be an underlying spirit of malice.

Mary didn't like him from the moment that her eyes rested on him and she told her father so, but Marble only smiled grimly:

"I guess he wouldn't go into a corner and die if he did find out that you didn't cotton to him," said the girl's father. "All the same, I don't yearn much after his acquaintance myself, but I don't think that we need lose any sleep because he's around."

Mary did not answer—but she shivered slightly. A woman has the knack of feeling things where men simply reason them out—and so she felt that Leadby would bring some shadow into her life.

Harry called that evening, as he was on the night trip. Mary told him of the coming of Leadby and the dislike that she had taken to him. Harry laughed and kissed

her, and promised that if the surveyor gave her a moment of worry he would wallop him on sight.

When the conductor waved a farewell hand from the window of the hut, Mary was her usual bright and confident self and was convinced that she had acted stupidly.

Then she went to her father and told him what Harry Hale had said. The depot-master listened in silence.

"All right, girl," he said, as he passed his hand caressingly over her head, "but it ain't always well for a woman to overlook her feelings about people and happenings. Your poor mother used to have these feelings." He stopped and swallowed hard. "If some had taken heed to them—the people that she told 'em to—they would have been better off."

He halted abruptly.

The girl passed her arm around his neck. "Tell me about her," she whispered coaxingly. "You hardly speak of her. I can just remember her, I—"

The whistle of the departing night freight came up the valley, echoing from the hills until it seemed as if a whole yard of engines were on the scream. Marble gently disengaged the girl's arm.

"Some other time, Mary," he replied hoarsely as he rose, and she saw a glint of tears in his eyes.

This was on Saturday. On the day following the surveying party took a rest. During the afternoon Leadby put in an appearance at the depot and proceeded to make himself as agreeable as he knew how.

Mary excused herself on the score of household duties and Marble was civil.

The surveyor had that exasperating form of persistence to which one cannot take exception, but which is annoying to the limit.

In spite of Marble's reserve and Mary's pointed absence, the man stuck until dinner-time. There was nothing to do but to ask him to remain, and he accepted.

During the meal he addressed his conversation to the girl and kept his eyes fixed on her in a manner that seemed to have a veiled insolence. Her answers to his remarks were as curt as she could make them, and when she rose to clear away the dishes, she did so with a distinct sense of relief and a hot dislike for Leadby.

The work in the kitchen being ended, Mary did not rejoin the couple in the little sitting-room, but, instead, went into her flower-garden. There she snipped the blossoms lovingly, picked a weed that had insinuated itself among the phlox, or removed dead leaves from her rose-bushes.

While she was kneeling in front of the moss-rose, she heard a step on the gravel. She turned. There stood Leadby with what was intended to be an amiable grin on his face. Mary rose and looked at him inquiringly.

"Just peeking around," he said in answer to the question on her face. "Pretty lot of flowers you've got. I'm mighty stuck on flowers myself—and pretty faces."

The note of familiarity roused the spirit of the girl.

"I'm not specially interested in what you like, Mr. Leadby," she said coolly, "and you'll have to excuse me, for I'm going in to father."

She made a move in the direction of the house. The surveyor made no attempt to make way for her.

"Before you go, perhaps you wouldn't mind giving me one of those—they're as nice as you are." He pointed to the moss-roses

Mary hesitated a moment. Hospitality struggled with dislike, and dislike won. Besides, she couldn't—wouldn't give Harry's flowers to this fellow!

"Sorry I cannot oblige you, but those roses are for a sick woman and one or two friends. You can have any others in the garden, but not those," said Mary.

"Then you don't count me among your 'one or two friends,' I s'pose?" queried Leadby, showing his gums again, and maintaining his position on the narrow path.

"I certainly don't, considering that we've only seen you once or twice."

"Well, you'll see more of me in the future, Mary, and now give me the rose and a kiss, and I'll let you go to papa."

He laid a hand familiarly on her arm. The girl looked at him with blazing eyes. She was burning with anger. His words and action were suggestively insolent. His face temptingly near to her.

She struck him with her open hand. Her outraged nature was back of the blow. She was a bonny, muscular girl, and the blow staggered the surveyor. He recovered himself, and, with an oath, made a movement toward the girl.

As he did so, the deep voice of Marble came from behind, asking his daughter what the trouble was.

"He has been impudent, dad, and as I hadn't a whip handy, I gave it to him with my hand, that's all."

Her cheeks were scarlet, and the light of battle was in her eyes.

Marble turned to Leadby, and there was a look on his face that wasn't good to see.

"You get!" said the father slowly, "and you keep away. If ever I catch you around this house again, I'll—" He pointed to the road

"But, look here, all I did was to—" he began.

Marble took a step toward him, but Mary caught him by the sleeve.

"Leave him alone, dad; he'll go, and I'll speak to Harry about him if ever he shows that face of his around here."

Leadby scowlingly made for the gate, and Mary told the tale of his insult to her father.

That same evening Simon Leadby wrote a long letter to a man whom he knew in the freight department of the road at Foundryville.

The communication was to the effect that Leadby had become much interested in the Marbles, that he thought that he might be of help to Mr. Marble in the way of promotion, and so he wanted to know something about the business and personal antecedents of the man.

He enclosed a five-dollar bill, and added that another would be sent to the freight employee when a reply came. The freight employee being a married man, was glad, and set himself to work to properly earn the rest of the promised sum.

A week later Leadby received the second letter, stating that Marble had been given his position because of his railroad experience in the East and a letter of recommendation from Haviland Stratmont, vice-president of the road, to the division agent, into whose hands the management of the new freight road had been committed.

The writer added that he also had been informed that before they came West the Marbles had lived at a small town called Jocelyn, on the boundary line of New York and New Jersey, but more than that he was unable to ascertain.

Leadby smiled unpleasantly as he read. Haviland Stratmont was a wealthy man and a philanthropist. He made a specialty of giving discharged convicts a chance of becoming reputable citizens again, by getting them positions when they had "done their bit," provided that their prison records warranted his so doing.

He was a member of two or three societies that existed for that purpose, and took up cases independently on his own account. The fact that Marble owed his appointment to him seemed to please Leadby mightily.

So the surveyor wrote to a New York firm of private detectives, and within ten days he received a notice from the Foundryville post-office, notifying him that a registered package was awaiting him there, there being no facilities for delivery of such matter at Sweet Brook.

When Leadby got possession of the package, he found it to contain printed and written matter from the detectives that caused that unpleasant smile of his to once more set his ugly mouth awry.

II.

MARY was returning from Mrs. Van Huysen's, whither she had been with the last of the season's moss-roses. The dear old soul was so thankful and had poured out her gratitude at such length, that the girl had outstayed her time.

She intended to be home by 7.30 P.M., so as to welcome Harry, whose train on the up trip, halted for a half-hour or so at Sweet Brook in order to take on produce for the morning market at Millswood.

It was close to that hour when she closed the door of the Van Huysen cottage, and tucking up her skirts so that they wouldn't interfere with her movements, she broke into a sharp run.

Just as she made the first turn in the road that led from the cottage to the depot, a man stepped out from the shadow of a clump of trees and called to her.

Mary's heart leaped with alarm as she recognized Leadby, but checking her first impulse to keep running, she drew up abruptly.

"Kind of in a hurry, ain't you, *Miss* Mary?" said Leadby.

"If I am, I don't suppose that it's anybody's business but my own!" flashed back the girl. "What do you want, Mr. Leadby?"

"Just a little talk with you, my dear—Miss Mary."

He added the last two words just as the girl was about to resent the "my dear," and he laughed again as he headed off her

indignation, saying, "But, come along, I'm going your way."

"You're doing nothing of the kind," declared the girl, making no movement and looking at him defiantly. "If you have anything to say, say it quickly."

Even as she spoke, a premonition of calamity came over her.

"Just as you like, my stubborn beauty. All I have to say, then, is this; I want to be a—a friend, a chum of yours. If you're willing to let me be that much, I'll do the right thing to you—in every way. If you don't—" he paused and lit a cigarette.

"Well, what?" asked Mary, the fear tugging sickeningly at her heart.

The man took the cigarette from his mouth and looked at her with a sneer deepening the lines on his face.

"I know enough about your father to make him lose his job; to make the God-fearing psalm-singers round about here turn their backs on him, and to cause that dear Harry of yours to chuck you over like he would a rotten orange."

The sudden and vindictive announcement of the surveyor struck the girl like a physical blow. She staggered. The twilight turned to night, and the hills and valley whirled before her. But recovering herself, she pressed her hand on her breast to still the beating of her heart, and faced Leadby.

"I think that you are lying." She spoke very deliberately. "But even if it were true, I wouldn't be on nodding terms with you after to-night, not if that much were the price of your silence!"

Leadby threw his cigarette away and came nearer to her

"Then, by Heaven! I'll take what you won't give me!" he snarled. "I'd have let you off with one kiss if you'd been civil! Now I'll take as many as I want, and if you say a word about it, I'll open my mouth so wide to-morrow that you'd better begin packing up to-night, for the valley won't have much use for you and your convict father!"

He sprang at her like an animal. She struck at him vainly, and the next instant she was powerless in his clasp, his lips searching hungrily for hers.

"Harry! Oh, Harry!" shrieked the girl as her assailant strove to overcome her resistance to his caresses, bruising her hand cruelly as he did so.

As if her cry had had the power to summon help out of the thin air, there came the sound of running feet.

Leadby heard them not, so engrossed was he in attaining his object. A moment later Mary, half fainting, heard the muffled crash of a blow and the grasp of the surveyor suddenly relaxed.

She felt herself caught tenderly as she was falling. When she opened her eyes, she looked into the anxious face of the conductor.

"Where is he—the beast?" said she "Oh, Harry, how lucky that you came when you did."

"I want you to rest here—on this bank, dear," said Hale. "That man is in the land of dreams yonder. I caught him a pretty one on the chin-point, although I do say it myself. If you'll excuse me, I'll try to bring him to and talk to him a trifle."

He assisted Mary to a seat and walked over to the still semiunconscious form of Leadby.

By the side of the roadway ran the small, noisy brook that gave its name to the locality. Harry filled his conductor's cap with water and quickly brought back the surveyor to a sense of his surroundings.

"Now," remarked the conductor, when Leadby had quite recovered himself, "d'ye feel all right?"

Leadby grunted an affirmative and prepared to move away. Harry laid a restraining hand on his shoulder.

"Not yet, you big skunk!" he declared fiercely, "this young lady could have the law on you, and me as a witness at that. But just to save her bother, I'm going to take the law in my own hands. Put up your hands!"

"Oh, don't take any notice of him, Harry. Leave him and come away."

"Mary, dear, will you oblige me by walking on a little way? This fellow has got to take a hiding, and I'm going to give it to him."

Harry Hale spoke with that mixture of kindness and command that "goes" with every woman, and Mary thought all the more of him.

"I'll not move a step. If you're going to give him a thrashing, I'll have to watch you do it."

She spoke with an adorable determination that almost made Harry desert the delight of battle for her company.

"Now, you," said the conductor, as he

turned to the silent and sullen Leadby, "get ready for what's coming to you."

The surveyor answered with a swift rush that was intended to take the conductor off his guard, but Harry had been taught the art of the foot and the fist by an old freight-smasher—a one-time pugilist—who showed the youngsters between whiles how to handle their bunches of fives at Steubenville, Ohio, where Hale was employed prior to coming to the Foundryville and Millswood line.

As Leadby shot out a vicious left, it hit nothing but the atmosphere, but in return came a resounding thump on the ear that set the chimes ringing in the surveyor's noddle.

As Leadby recovered himself and again turned on the conductor, he saw Mary's face convulsed with laughter, but he could hear nothing because of the sound in his ears.

Nothing hurts an egotist as much as being laughed at; nothing is more fatal to a man's chances in a scrap than loss of temper.

The surveyor was both sore and furious. Consequently, the end came soon. Harry crossed and cut and jabbed him at will and, finally, Leadby sank to the ground with a down-and-out grunt, whereupon the conductor took him by the collar and slack of the breeches and doused him in the brook.

When he revived somewhat, Harry assured him that what had been done to him wasn't a peanut-husk to what would happen the next time he annoyed Mary by word or deed

Then Harry and the girl strolled in the direction of the depot.

"Harry," said Mary suddenly, "of course I don't approve of fighting. I think it's dreadful, but a woman likes to feel that—that the man she's fond of can take her part and his own when it's necessary. Dear—you thrashed that creature beautifully!"

They halted so that Harry might reap his reward for his fistic ability from Mary's lips.

"Dear," said the girl a little later, "that man hinted that he—he knew something awful about father."

"He did, did he!" replied the conductor, "well, of course, he wasn't telling the truth."

"No, perhaps not; but supposing that it were true, would—would it make any difference to you?"

"Do you mean as far as you are concerned, Mary?"

The girl nodded.

Hale looked at her with a reproachful glance.

"I hope to marry you, not your father," he answered slowly. "If your dad was one of the worst, it wouldn't make the slightest difference to me; except that I'd feel that I'd have to protect you from the fools that might try to make you unhappy because of what your father had done. But you and I are talking just as if it was worth while taking stock in the words of that scoundrel."

Mary gave a little sigh of relief and squeezed his arm, but said nothing. Harry knew that she trusted him implicitly, although she didn't put that trust in words.

III.

THE freight pulled out, the young conductor standing on the rear platform of the buggy, waving a farewell to the Marbles.

When the train disappeared in the darkness, Mary turned to her father.

"What made Harry come to look for me to-night, dad?" she said.

"You were late, and he got kind of nervous. Said he felt that you might get into trouble and need him. So he started out to hunt you up."

A faint smile shot over Marble's stern features. "I reckon he'd hardly have been fussed up unless he was keeping company with you."

"He came just when he was wanted," answered the girl.

"Meaning what?" queried her father. "I thought you two looked kind of flurried when you got home."

"Dad," said Mary, laying her hand affectionately on his, "you know how much I love you. It seems to me that I've given you two shares of love—one that is yours, and the other that would have been mother's had she lived. There is nothing in the world—past or present—that could come between us. You believe that, don't you?"

"Of course I do, Mary," said the father, looking at her anxiously, "but what's that got to do with what we were saying about Hale?"

"Everything. Oh, dad! how can I tell

you!" She placed both arms around his neck and clung to him convulsively Marble released her grasp and looked at her intently.

"Mary," he said, "don't tell me that—that Hale has done you any wrong!"

In spite of her feelings, the girl almost laughed. "Harry is a man. He wouldn't dream of being false to himself or me in any way. No, dad, it isn't Harry. It's *you*."

"Me? I don't catch on, my girl. Speak out"

Mary took the rough hands of her father in hers and haltingly told him of her meeting with Leadby that evening; of the hints and threats that the surveyor had made about the station-agent and how Harry had come to the rescue.

As John Marble listened, his face whitened beneath its tan and beads of mental agony gathered on his forehead. Then Mary, with the instinct of her sex that prompts it to heal wounds of heart or body, drew his head down on her shoulder and comforted him.

A minute passed before either spoke John Marble raised his head and looked his daughter in the face.

She was shocked to see the lines that had gathered on it in the brief time that had passed since she had spoken.

"Leadby has spoken the truth, Mary," he began.

His voice was thin and distant, as is the voice of a very sick man.

"The reason that I've kept it from you," he went on, "was the fear that—that it might make you turn from me—make you despise, even hate me. And that would—you know that you're all in the world that's left to me."

The piteous tone in which he spoke was in strong contrast to his usual curt, masterful manner of address. It went straight to her heart.

"Dad, dear, haven't I just told you that there's nothing in the world that could come between us?" She brushed the damp hair from his forehead. "That's why I said as much before I started this talk. Tell me all and trust me."

"There isn't so much to tell. I can put it into a few words. I loved your mother. I never knew how much until she went from us. But I got to drinking. Liquor steals away a man's heart as well as his brains

"I neglected her, lost work and friends and, finally, the home. We took a room in Buffalo, and time and again I promised to reform. She stuck to me like the angel and woman that she was, but the whisky call made me deaf to her prayers and blind to her tears.

"You were a little thing, about five years old. Then came a time when we were without a penny and no prospect of getting one. The unsatisfied thirst for whisky was making a madman of me.

"One night, prompted by this thirst, I broke into a saloon and half emptied a bottle before the police, who had seen me enter, could lay their hands on me. The crazy thought that I was going to be separated from the liquor made me act like a wild beast. I fought like a tiger.

"When I was finally subdued, two of the officers were lying on the floor, senseless. I had used the bottles against their clubs. Burglary and assault in the first degree were charged against me, and I was given the extreme penalty of the law.

"Your mother—" his voice broke, "died the day that I was sentenced. Heart trouble, the doctors called it. So it was—a broken heart."

Marble buried his face in his hands and Mary softly stroked his head.

"Friends took charge of you and you were sent to an institution for children circumstanced like you. I was fortunate enough to tip the prison authorities about a jail delivery plot—a plan on the part of prisoners to break out of prison—and had my sentence reduced one-half. When the time arrived for me to come out, Mr. Stratmont gave me a chance.

"He got me work around the depot in Jocelyn, and it was with his help, too, that I got you out of the home after that I had shown him that I was to be trusted. You were then fifteen years old. None of the Jocelyn people knew that I had been wearing prison stripes. We lived there three years and then this opening came, and I have to thank Mr. Stratmont for getting it."

"Poor dad," said the girl huskily, as she again stroked his head.

"This has been on me for years like a nightmare," continued Marble. "I was afraid you would learn it and turn from me; that others would hear of it and turn on you."

He paused a moment, then asked, "You will always stand by me, my daughter?"

"Always," she answered. "I wanted to know about our past life, ever since you took me home, but I felt that there was something that you didn't want to talk about. I wonder how Leadby managed to find out about—us."

"That I can't make out," said Marble with a sigh, "and I suppose that if he does talk, we won't have many friends left in these parts."

Mary patted his cheeks affectionately. "I think I can stop his talk," she said. "I'll let him know that if he says one word about us, I'll swear out a warrant for his arrest on a charge of assault. If I did so, I venture to think that it wouldn't help his prospects with the company, and—and—"

"And what?"

"And some of my friends round here—Vanbort and the Shrews and Von Hague and Spragen and others might make it uncomfortablelike for him."

"To say nothing of Harry, eh?"

"I shouldn't let Harry mix in with any ducking or rail-riding," said Mary decidedly.

From whatever motive it was, the fact remained that Leadby did not open his lips about Marble. It might have been that he was waiting his time to spring the information, or that he had an inkling of the way in which Mary proposed to strike back, or that he was evolving a method of using his knowledge, or what not.

He kept mum, refrained from going near the Marble cottage, and went about his business with his face somewhat more sullen than ever.

Harry was taken into the confidence of the Marbles regarding the father's past, and vindicated the belief of his sweetheart by behaving "just splendidly," as she put it.

It was Mary who told the story to him, and when she had concluded, the conductor went right over to the depot where Marble was working, and held out his hand.

"Will you shake?" he asked. "Mary's been talking to me about what has been."

The strong features of the agent twitched as he took the other's hand in his, and said never a word. Then Hale returned to his girl and they began to talk about the possibility of building an extension onto the cottage, for Mary had no intention of leaving her father when she became Mrs. Hale.

Leadby had gone to Foundryville. None of the men associated with him knew of his intention of taking the trip until there came a letter for the surveyor, in which was an official order on the conductor of the south-going freight to afford the former accommodation in the caboose.

At the moment of his departure he had given out that he was to report progress on the work of the survey at headquarters.

As it happened, the down train that night did not have Harry Hale as conductor, which the surveyor learned with a good deal of relief when he reached the depot.

While waiting for the arrival of the freight, Marble came on the platform and walked up to him.

"You attempted to assault my daughter a few night ago," said the agent, the veins on his forehead swelling with repressed anger. "I've taken no steps in the matter because you got what you deserved from her escort and I didn't want any publicity for the sake of the girl. But if she—or myself—are annoyed in the future, I'll have you arrested and, maybe, you'll find that there's more coming to you than what the law will hand out! You understand?"

"I understand—oh, yes. And I'll take the hint, coming as it does from a party who's an authority on the workings of the law. Do *you* understand—William Stone?"

Marble caught his breath like a man who is standing under an icy shower. Stone was his right name—the name under which he had been convicted and sentenced.

The sneering smile came to Leadby's face as he noted the effect of his words.

"If you push me a bit too far," retorted Marble, recovering himself, "perhaps you, too, will have a chance of seeing the inside working of a prison. Keep that in your mind. I've been punished by the law. Your time to be punished is to come, if my daughter chooses to open her mouth."

IV.

LEADBY, having finished his business at the offices of the company, went back to his hotel and changed his natty afternoon suit for the rough clothes he wore when working. He also shed his derby, substituting a cap.

Thus attired, he made his way through various back streets of Foundryville until he reached a section of cheap saloons,

dancing-halls, and small groceries. He entered one of the saloons.

Half a dozen sodden men raised their heads from the tables at which they were sitting and dozing when he entered, and two or three of them began to move toward the bar, noticing that he was a stranger.

A big man with a shaggy head behind the bar—O'Hannigan himself—who was wiping glasses with a soiled towel, eyed the newcomer sharply, and then dropping the towel, held out a damp hand.

"'Tis meself thot's glad to see yez," said he. "What's the name of it? From water to wine 'tis yours. Get back, ye bunch o' grafters, or I'll bash the faces of ye!"

The interlopers sneaked back.

"I want to have a word with you in private, Han," answered Leadby. "Let's have a bottle of wine and a box of your best flor de cabbagio—in there."

He motioned with his head in the direction of a room marked, "Private" at the back of the saloon.

"I'm wid youse. Pat, come up here an' tind bar. Leave the wurrk to be."

An unseen person in the cellar, the trapdoor of which opened in the flooring behind the counter, was the object of O'Hannigan's orders.

O'Hannigan, gathering up glasses, cigars, and a bottle of alleged wine, led the way to the "office," followed by Leadby. Once inside, the saloon-keeper locked the door, closed the transom, and produced a corkscrew. The surveyor barely put his lips to the stuff. O'Hannigan drained his glass and reached for more. Leadby smiled bitterly.

"Hadn't we better talk before you poison yourself?" he asked.

The other grinned. "'Twould take more than two glasses or two bottles to dope this mug; but if 'tis y'ur wish, I'll leave it be till th' business is off our moinds. Is it th' same as last time?"

Leadby scowled at him. "I don't know what you are talking about," he growled. "There was no 'last time.' I've told you again and again to forget any little jobs that I might throw your way. If you've such an infernal fly-paper sort of memory that everything sticks to it, I'm through with you."

He rose as if to go.

"Kape yer sate, sir, if ye plaze," coaxed O'Hannigan. "'Twas a slip o' th' tongue. I never talked of you or yours by wurrd, sign, or token to a soul—except to Johnny Reagan; and Johnny got sore by raison of th' lawyer not kaping him from being sint up, an' hinted that he moight open th' mouth of him if the case was not tried again.

"'Spake but one wurrd about Misther Lidby in coort or out of it,' says Oi, 'an' 'twill be th' end of ye. If I lift me hand, the gang'll be afther ye noight an' day, an' they'll rist not until they git ye.' He never talked of squ'alin' afther that."

"All right," replied the surveyor impatiently, "and now listen."

Lowering his voice, Leadby talked earnestly to the saloon-keeper for a space of five minutes or so, the other nodding understandingly at intervals.

O'Hannigan lit another cigar, and drew on it several times before he answered.

"'Tis touchy business, sir," he said, after a time. "It may mean seven years for th' man who tries to put it through, even if—if nothin' happens to th' party you've got it in for."

"I wish that you could get it through that thick head of yours that there isn't one chance in a million for his being caught," retorted Leadby angrily. "Haven't I told you that I've fixed things so that detection is impossible?"

"You certain have, sir, but will youse please to remind yourself that you is a white willy at th' business, an' that you can't see as far ahead as a man who adds to th' earnings uv a bum saloon by doin' a good turn now an' then to a gentleman friend."

"Well, perhaps you are right," assented Leadby reluctantly, "but the question is—have you got anybody around who will enter my employ as chainman?"

"I have," replied O'Hannigan, after a few moments' reflection. "But I give you fair warnin', he'll want a fair price."

"He'll get it—and you'll get your piece, also. I'm prepared to put up coin to get even with this uniformed guy and his girl."

Then the two talked money matters for a few minutes, then Leadby passed a roll of bills to the saloon-keeper and rose.

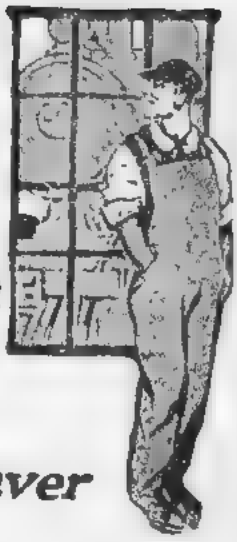
"Tell this party to keep a close watch on his talk. What's his name, by the way?"

"Billy Sprague, known to the cops as 'Smash' Sprague. He's a strong-arm guy, but he looks like a gent, all right."

"Good. I'll look for him on Thursday."

(To be concluded.)

Told in the Roundhouse



By *Walter Gardner Seaver*

Give Comedy the Clear, and the Laugh-Valve Will Pop Even When the Lights Gleam Red and Things Seem To Be Serious.

NEW SERIES, NO. 1.

"HALLO, Mike, how are they coming?" asked Thompson, as Murphy joined the circle seated around the stove.

"Rotten," Murphy tersely replied.

"What's wrong now?" Thompson inquired, turning to face his friend.

"Nothing much; two bridges and one trestle and about three miles of track gone."

"Is that all?"

"Ain't that enough?" said Murphy with a grunt of disgust. "That means grief for the whole gang for the next two weeks."

"Oh, well, what else can you expect? You *will* hang on to the railroad game and get it in the neck."

"Me get it in the neck? You must be woozy. My time will go on and I'll get my pay-check just the same if the whole darned road goes out. But all the same, I don't like rainy seasons, with their floods and washouts. Why can't rains come slow and easy so the railroads won't have wrecked bridges, washouts and landslides to contend with? It would have just as good effect on crops and obviate the use of a whole lot of unparliamentary language by those who have to bank over low joints and high centers every day and night," declared Murphy.

"Yes," Thompson said, "no doubt things would be better if you could regulate them just to suit your taste and convenience. But your taste and convenience might be entirely different from the other fellows'. Think of the fun that you'd miss if you could run the universe to suit yourself."

"Fun?" cried Murphy, snorting his dissent. "I would like to see any fun in cloudbursts, washouts and landslides."

"I don't believe that there ever was an accident on a railroad that didn't have a humorous side, if you looked for it," rejoined Thompson. "It's just as easy to look on the sunny side as to hunt for the shadows."

Murphy waved a disparaging hand.

"Chariton bridge is out; the 18-spot is on her side in the ditch, and twelve or thirteen box cars slung promiscuously over

the landscape. What is there funny about that?" he asked.

"Anybody hurt?" his companion inquired.

Murphy shook his head.

"No. The whole caboodle caught on in time to go overboard, and they all hit the grit with hardly a scratch."

Thompson nodded.

"Well, just you wait till you hear what they have to say when they are telling about the wreck," he said. "I'll bet the cigars that if you listen closely you'll hear something funny."

Murphy shrugged his shoulders doubtfully.

"Maybe you know of wrecks that have been funny," he remarked. "I don't know that I have ever heard of anything hilarious about a smash-up."

Thompson glanced at Murphy and smiled his triumph.

"I can tell you of several cases. While they were building the Denver, Memphis and Atlantic the road was owned and operated by the Fitzgerald & Mallory Construction Company, until it was sold to Jay Gould and was turned over to the Missouri Pacific for operation.

Johnny Feared a Hoodoo.

"The line had been completed from Chetopa to a point somewhere near Larned, and was in operation from Chetopa to either Conway Springs or Kingman, I am not certain now as to which place it was.

"The headquarters," Thompson continued, "were at Winfield, which was the division point at the time. Johnny Dixson, who was running the 9-spot, an eight-wheeled Rogers, was sent out with ten cars of cattle and two cars of miscellaneous freight. It was Friday, the 13th day of the month, and his train, including the way-car, consisted of thirteen cars.

"When Johnny saw the combination he put up a kick. Thayer, chief engineer of the construction company, was the general manager of the railroad company, and he happened to be at the depot just as they were about to pull out. Johnny set up a howl about unlucky thirteen and urged that they either pick up another car or drop one. He was only laughed at.

"He then put the matter up to Thayer, who asked why he objected. Johnny told him that thirteen was an unlucky number, and that when it came to handling thirteen cars on Friday, the 13th day of the month, there was sure to be an accident before they got over the division. Thayer, like the rest, was amused, and Johnny climbed up on his engine, dead sore.

Conductor Laughed at Him.

"It was in the early part of the summer, either May or June—I think it was May. For the preceding two months the rainfall had been unusually heavy and almost continuous. Much of the road had only been open a few months and only a small portion of the fills had been in for a year. The track was newly surfaced and the rains had greatly softened the new banks so that enginemen had to keep the weather-eye open

"Johnny pulled out and swung them along at a good clip until he passed Tisdale and commenced dropping down the divide to the Silver Creek crossing.

"Just before he got to the bridge he squealed for brakes and shut her off. Getting down from the cab, he went ahead and carefully examined the bridge. Then he climbed back onto his engine and pulled out.

"At every little trestle he would slow down until he could see whether the little branch was on a tear or not; then he would open her up and go ahead again.

"At Grouse Creek crossing he repeated the tactics he had adopted at the Silver Creek bridge, and would not pull across until he was satisfied that everything was standing.

"At Dexter they had to wait a few minutes for orders, and the con put in the time joshing Johnny about his thirteen superstition and told him that as one of the cars was to be set out at Cedar Vale the hoodoo would be broken.

Told Him to Keep Her Going.

"'All right,' Johnny answered, 'have it your own way. But, mark you, we haven't got to Cedar Vale yet.'

"'Oh, rats,' exclaimed the con. 'You get on that engine, keep her going and we'll get to Cedar Vale all right.'

"'Oh, very well,' barked Johnny. 'Possibly you know this old road better than I do. So if we go in the ditch don't blame me. I'll whirl 'em as fast as the devil will

let me turn a wheel, and if we have a smash it's up to you. This road-bed isn't safe for any Nancy Hanks performances after all these rains.'

"'You put this train into Cedar Vale on time,' returned the con, 'I'll stand for any accidents on account of the road-bed or rains.'

"'I'll put her there or run a wheel off,' snapped Johnny. 'And you can just get ready to hang on by your eyebrows, dropping down the Flint Hills.'

"They climbed the hill out of Dexter and then dropped down into Crab Creek. Johnny had 'em going all right and the con began to get uneasy. Several times he was on the point of getting out and swinging Johnny down, and then he thought he would just let him go and teach him that the thirteen superstition was all rot.

"Crab Creek was bank-full and running like a mill-race, but the track did not cross the creek, climbing up into the Flint Hills on the east side of the stream. Johnny noted the unusually high water, and immediately concluded there had either been a cloudburst or an unusually heavy rain during the night; far heavier than that at Winfield.

Wagon-Road Was Washed Out.

"The train stopped at Hooser, a station in the pass at the summit of the Flint Hills, and Johnny asked old man Hooser, a settler who owned that quarter-section and for whom the station was named, if he had heard of any damage done by the storm.

"Hooser said that the water had poured down the wagon-road leading from the summit and had washed it out. What had the day before been a fairly good country road was now an almost impassable gully; all the soil having been washed away down to the flint bed-rock

"The wagon-road was reported washed out at several places between there and Cedar Vale, but so far as noted the bridges and culverts of the railroad were all in place.

"Johnny pulled out and a moment later was dropping down the Flint Hills. The grade here dropped sixty-five feet to the mile, but Johnny did not open her up as he had threatened.

"At that time all freight-cars were not equipped with air as at present, and the Armstrong brake was pretty strongly in evidence. Johnny dropped carefully down the hill for the four miles of the descent, and came out into the comparatively level valley down which the road ran to Cedar Vale.

"There were a number of little trestles spanning branches and draws, but there did not seem to be any unusually heavy head of water coming down any of them from the Flint Hills. He pulled her open and quickly had them spinning at a twenty-mile-an-hour clip.

Engine Went Through Trestle.

"About two miles from Cedar Vale there was a little draw that ten months out of the year was as dry as a powder-horn. There was a tangent of nearly half a mile on either side of it.

"As Johnny swung into this tangent, he saw at a bend in the draw that it was bank-full and running a flood. There was a good deal of drift going down, and among the tossing sticks he fancied he saw the square-sawed timbers of a bridge.

"He could not see the trestle, but he squealed for brakes, shut her off and threw her over after yelling to his fireman to jump. He caught a glimpse of the fireman as he hung for a minute looking for a place to drop.

"Just as he hooked the reverse-lever down in the back corner, the engine struck the trestle. It crumpled up, and Johnny was pitched head first from the gangway.

"The engine went down with the trestle and all the cars piled on top. Then they toppled off on either side, and when the way-car came along it ran out on top of a box car and stopped. The brakemen were tossed from the top of the train and dispersed over the landscape.

"The con was unhurt, but had a little difficulty in getting out of the way-car, the doors having jammed shut. When he did, he went forward to see what had happened to the engine-crew. He expected that Johnny was buried with his engine under the wreck.

Head Stuck in the Mud.

"Just as he reached the ground, the fireman came up, limping. He had twisted his ankle when he dropped off into a nice little pile of riprap. They began looking for signs of Johnny.

"They finally caught sight of a pair of legs, terminating in a pair of heavy brogans frantically kicking the air. They hustled down the bank and pulled Johnny out of the mud in the edge of the stream, where he had sunk head and shoulders.

"He was plastered with the sticky black mud and they finally managed to clean his face and get the mire out of his mouth.

"Then the conductor, who happened to have a small flask of quinin and whisky in his pocket, which he had been taking for malaria, forced the neck of the bottle between Johnny's teeth and tipped it up until a liberal dose of the bitter stuff trickled down his throat.

"The remedy was effectual, and Johnny sat up, choking, gurgling and gasping. He looked around at the wreck and then up at the con, and remarked:

"'Well, you son of a rotten turnip. Maybe you are convinced now that thirteen is an unlucky number?'"

Thompson paused for a moment.

"Maybe you'll like this better, Mike," he resumed.

"Down on the Iron Mountain, the Belmont branch, which leaves the main line at Bismarck, runs alongside the St. François River for a considerable distance on the east side of the stream. At places the roadbed, especially the fills, were protected by riprap for possibly a third of the distance from the water to the top of the fill.

Saw Bank Slip into Water.

"McQuaide, engineer, and Jerry Phalen, fireman, with the 30 were pulling No. 3 south. The spring had been an unusually wet one, and all enginemen were keenly on the lookout for any indications of a washout or landslide.

"McQuaide was leaning out of his cab-window intently watching the track ahead and at the same time noting the whirling, tossing yellow flood as it dashed up against the bank.

"Suddenly he saw a slice of the bank slip into the water quite a distance up the line. He did not wait to see whether the track was affected or not, but shut her off, threw on the air, and shoved Jerry, who was standing in the gangway on the right side, overboard, going out himself immediately after

"Jerry struck the edge of the fill feet first, toppled over, and went rolling and bumping down the bank, over the riprap, and into the yellow torrent.

"McQuaide struck the edge of the bank feet first and tobogganed down until he struck the riprap. Then he changed ends and went head first into the stream. It was almost as thick as fluid whitewash.

"The engine struck the weakened portion of the road-bed, moving almost entirely by the weight of the train behind her. The west rail sank and she turned aside, plunging down the bank until the riprap stopped her with the nose of her pilot just in the edge of the water.

Went Overboard into the Drink.

"The mail-car, which was first behind the engine, lifted her forward trucks off the rail, swung about two feet toward the river, and then, changing her mind, dropped her trucks with two of the wheels between the rails, and the other two just at the outside edge of the ties on the river side. None of the rest of the coaches left the rails.

"Morse, the conductor, came hustling ahead just as McQuaide and Jerry were crawling back up the bank.

"'What in the devil made you throw on the air so hard?' demanded Morse. 'All the passengers got right up and piled over the back of the seats in front of them.'

"'He didn't throw on the air,' said Jerry. 'He didn't have time. He shoved me overboard into the drink and came right after me.'

"'I didn't throw on the air. I saw that bank slip out and I went overboard at once,' said McQuaide.

"'You did throw it on,' the con insisted. 'And you put it on so quick that the whole train buckled up. Nice lot of damage suits the company will have to stand for bruises, broken arms and legs, because you got scared and lost your nerve.'

"'Well, there's the 30 all right and we'll soon see about it,' McQuaide retorted.

Called Con "Water-Route Morse."

"They climbed into the cab and found the throttle closed and the air-brake handle clear around to the last notch, giving her all the force of the air. The reverse-lever was latched down in the last notch in the quadrant.

"'Now, see what you did,' said Morse. 'You not only threw on all your air, but

you plugged her besides. No wonder the train buckled and all the passengers were hurled out of their seats.'

"McQuaide looked at the evidence a minute and then said:

"'See here, Morse; the next time I see a washout or a landslide I'll just go overboard and let the old girl rip. You and your passengers can go to glory by the water route if you want to.'

"Some of the passengers who had climbed down from the coaches and came ahead to see what was wrong overheard McQuaide's remark, and the story was repeated along the line. The result was that the conductor was dubbed 'Water Route Morse,' a title that he retained for a long time, much to his disgust.

"I have known cases where the boys have taken advantage of floods, high water and washouts, to have fun with greenhorns," Thompson continued.

"When I was railroading in Texas it was the unwritten law in all circles that the tenderfoot had to undergo an initiation more or less strenuous, according to his line of work and the ingenuity of the old-timers.

"On whether the tenderfoot took it gracefully or ill-naturedly depended his standing among his fellow workers. Sometimes the old-timers got the worst of it and had the tables turned on them.

Planned to Test Irishman.

"A man named Mike Crawford came down to the Texas and Pacific in the early eighties, when many of the engines were the old wood-burners. He applied to the master mechanic at Marshall for a job as runner, and was sent out to deadhead a trip to Fort Worth in order to learn the road.

"He was riding on Billy Nelson's engine. On the way out he stood the chaffing good humoredly, but had little to say, and none of the boys could get a rise out of him; not even in answer to the time-honored and age-worn query of 'What was your name before you came to Texas?'

"The Trinity River was on its periodical spring spree, and the red flood was over the banks and backing up all over the bottom-land. The road-bed of the Texas and Pacific was in no danger, and it did not occur to the train-crew to question the security of the bridge across the Trinity between Fort Worth and Dallas.

"At the 'Tay Pay' roundhouse, in Fort Worth, the next morning, there was an informal meeting of the engine and train crews, and a job was arranged to test the nerve of the little red-headed Irishman.

"When Mike showed up in ample time to take his place on the right side behind Billy, he was cordially greeted, and responded good-humoredly to their inquiries as to how he had slept, and as to whether he had been annoyed any by the Texas terrapins in his bed.

Mike Was Too Wise to Jump.

"The conversation then turned to the recent rains and the high water in the Trinity. Some of the crew expressed the fear that Trinity bridge was in danger. They declared that the river was reported to be cutting into the back-filling behind the western abutment, which was the Fort Worth side, and unless great precaution was taken the back-filling was in danger of being washed out.

"A train might go into it before it had been seen by the track-walkers, so they decided that it was the part of wisdom to run very slowly and carefully at that point.

"Mike took no part in the discussion, and was apparently uninterested. None of the boys imagined that he noticed the wink that Nelson gave the con as he spoke about running slowly.

"The train pulled out on time, and as they began dropping down the hill toward the Trinity the fireman took his stand in the left gangway, while Billy kept craning his neck and endeavoring to get the earliest possible glimpse of the bridge.

"Within a few hundred feet he yelled to the others to jump, squealed for brakes and plugged her. Then he went out just as the fireman dropped off the left side.

"Nelson and the fireman jumped a little too far and struck the edge of the bank. They went rolling end over end down to the bottom of the fill

"But Mike did not go overboard. Not he. He glanced at the top of the head car in the train and saw the head and middle brakemen unconcernedly looking on.

Told Them Not to Wink.

"Mike threw her back into the forward-motion as soon as she slowed down, opened the throttle and jumped out. By the time

Nelson and his fireman got to the top of the bank the cars were passing them at a thirty-mile-an-hour clip, and they were unable to get aboard.

"Mike ran the train to Dallas and stopped at the depot. Nelson and his fireman came in about three-quarters of an hour later, having had to tramp the ties to town. When they swung onto the engine Mike said:

"'It's all right, boys. I know that I am a tenderfoot and have to do my little stunt before being received into full fellowship, but the next time you fellows put up a job don't wink at some other fellow, and don't have your head and middle brakemen both on the front car watching the cab. To a man who has banged over as many miles of railroad as I have, such maneuvers are as plain as print.'

"Nelson, the fireman and the con agreed that it was on them. The con reported that they had been delayed by a hot-box, and the train continued to Marshall. Mike was given an engine in a day or two, and before long he was the leader among the boys in planning stunts for the benefit of the tenderfoots.

Rode on Top of Cab.

"When Will Craig was running on the Kansas Pacific out of Kansas City, his crew was sent out with a circus-train. It was early in the season, and the circus had been on the road only a short time. They pulled out of North Topeka shortly after midnight bound for Manhattan, the next stop.

"If there was anything that the railroad man of those days detested it was catching a run with a circus-train. Nowadays many roads make a practise of assigning a crew to a circus-train, and that crew handles the train as long as it is on the line.

"In those days the crew only went over their own division, and when they reached the division-point a new crew took it and remained on the job until it left their division.

"Craig's division, if I remember rightly, was from Kansas City to Abilene. The only stops the circus made were at Manhattan, Junction City, and Abilene after closing at North Topeka, the first stand out of Kansas City.

"Craig was braking ahead. The night being rather warm, he was riding out on top instead of inside the cab. This caused the tumble of his life.

"The spring rains had been later than usual that year, and very heavy. All of the watercourses were a constant source of uneasiness for the train crews. The road was ballasted only for a small portion of its length at that time, the company being obliged to get along with the original earth surfacing.

Expected Something to Happen.

"The rapid settlement of the prairies and the consequent rapidly increasing traffic rendered it only a question of time until the road must be ballasted with gravel or broken stone. No serious wrecks had yet occurred, though derailments from spreading of the rails were not infrequent.

"The trainmen all thought it was about time for something to happen and no crew knew, when they went out, whether or not they were the chosen ones to do some ground and lofty tumbling over the Kansas prairies.

"When the circus-train pulled out from North Topeka some of the boys told Craig to keep his peepers open, for a smash was about due, and the chances were that luck would take it out on the circus-train.

"Craig advised them to keep their shirts on and not to worry about him or the circus-train. If it was written in the stars that the circus-train was to go into the ditch, why into the ditch she would go, and there was no use in borrowing trouble by worrying about possibilities. If the train went into the ditch he would be with her, and his fate was on the knees of the gods.

"Craig was riding on top. The train had stopped at Wamego for water and orders, and the engineer was whirling them along at a lively clip. Everything was running smoothly and there was no apparent reason why the run should not be made on time and the train delivered in good order.

Spread Animals Over Landscape.

"In railroading, as in many other things, it is always the unexpected that happens. No one dreamed that an insignificant little eighteen-inch box-culvert would be the means of strewing that fine train, with its load of costly animals, all

over the Kansas landscape. That is just what happened.

"At this point the road runs along the Kaw Valley, on the north side of the river. When near the little station of St. George, a box-culvert sank under the second car from the engine. It was loaded with horses and happened to be the one upon which Craig was riding.

"Craig's first intimation that anything had happened was when he found himself seated in a newly plowed corn-field between two rows of corn, clear off the right-of-way. His lantern was burning as brightly and placidly as though still on the running-board.

"The car on which he had been riding had been battered into kindling wood, and about half the horses had been killed.

"The car containing the monkey cages was next. It had been battered to pieces, the monkey cages had been broken open, and the animals were scampering over the prairie uttering plaintive cries of terror.

"One little marmoset landed near Craig. Before he fully realized what had happened it had jumped to his shoulders and wound its tail around his neck.

Monkey Wouldn't Leave Him.

"Craig tried to induce it to let go, but the more he endeavored to get rid of it the closer it clung, and he was finally obliged to go about his duties with that monkey riding on his shoulder.

"None of the train-crew and none of the circus people was injured, as the coaches in which they were riding did not leave the rails. About two-thirds of the cars were scattered over the landscape, in all shapes and conditions, some on their sides, some standing on end, and others sitting upright at right-angles with the track.

"Craig, as head brakeman, had to go ahead to flag the wreck, and the monkey went along. He refused to leave him, and upon the approach of any one he would scold, chatter, and show his teeth, with the result that no more friendly overtures were made to him.

"When the wrecking outfit arrived and Craig was relieved, he sought the manager of the circus and returned the marmoset. There was a lively scrap in getting him away from Craig, and Will received several scratches and the manager's left thumb was almost bitten off.

"Finally his monkeyship was secured, and as they took him away he cried like a child and did his best to get back to Craig. The little animal seemed to think that Craig alone was his friend and the only one able to protect him."

Thompson paused and lapsed into silence.

Had a Double-Edged Picnic.

"Hallo, Johnny, how's the wreck?" asked Mike. An engineman came in, and climbing up on the machinist's repair bench, he pulled out a blackened dudeen. Then he proceeded to fill it with cut plug, tamping it down in the bowl with a blackened forefinger.

"Oh, she's there, all right, all right. I think that 18 will take a turn in the backshop," Jack answered. "Most of the boxes will be burned to save the iron for scrap. There is an even dozen of them piled in every conceivable shape, and what gets me is how they all managed to get so thoroughly smashed, and none of the crew even scratched.

"Jim Davis," the fireman continued, "skinned his left hand and arm trying to plow a furrow through the riprap, and he can't say how he got off the engine.

"Say, fellows," Jack exclaimed, "they tell me that there is no need of putting up good money any more to go to circuses. All you have to do is to get Hank Donahue to show you the acrobatic stunts that he performs when he goes overboard from an engine running thirty miles an hour. From what the fellows tell me it was sure a double-edged, copper-bottomed, brass-riveted picnic.

"What did Hank do?" came the question in chorus.

Stood on Head by the River.

"What didn't he do, you mean to ask, don't you?" replied Jack. "They say that he swung out of the gangway and dropped without trying to catch the step, landed on his knees on the edge of the bank, turned a somersault, plowed a trench halfway down the bank with his right shoulder, then stood on his head, and finally landed square on his feet in the edge of the river in about two feet of water, swearing because he lost his pipe in the tumble.

"Tom Brown, the head brakeman, they

tell me, was on the fourth car from the engine when they commenced going over. He made a jump to the left just as the car he was on went out. He landed plump on the next one, which was following suit.

"Then he made another jump, this time going clear, and they say that he jumped so high that he went clear over the borrow-pit and landed astride of the barbed-wire fence

"Dennis Nolan, the middle brakeman, went down with the car he was on.

"This car did not even lose her trucks. She turned square away from the track, ran down the bank and across the right of-way, bringing up against a fence-post which she had evidently chosen as a fitting bumper.

"Dennis did not even lose his footing. He says it all happened so quickly that before he had decided whether to jump or not the car had decided it for him.

"Jim Smith, caboose-brakeman, was on the rear platform, and did not know a thing that was happening until the way-car fetched up with a thump that banged him back against the side of the car with such force that he came down to a sitting position on the platform. There he sat and rode down the bank until the way-car turned over and dumped him in the ditch.

"Hemenway, the con, is a very dignified sort of a cuss. He ought to have been a parson instead of a common every-day rail-pounder. He was at the lookout in the cupola when he saw the cars ahead commence doing their stunts, and he started to crawl out through the cupola window onto the roof.

"He stuck fast when about half-way through and there he was, kicking like a frog and wiggling his arms, when the boys came up and began to pry him out. He forgot all about his dignity and was swearing like any old railroader.

"Hank Donahue told him that if he wanted to practise swimming lessons the place to do it was in the water, and not in the cupola of the way-car.

"Then Hemenway did burn the brimstone and sulfur. Say, fellows, you ought to have heard him. I would have given my next pay-check, short as I am, to have been there if the half of what the boys tell me is true

"They say it was as good as a vaudeville show to hear him use the language and the flowery and picturesque oaths that he let fly. Most of them, the boys say, were absolutely new to them, and some of which they are absolutely sure was original with Hemenway.

"If Donahue and all his male and female relatives have to go through one-fifth part of what Hemenway consigned them to, they will be fit subjects for canonization in short order.

"Donahue says that when the 18 began to turn over, she actually humped herself so as to throw him clear, and this was the reason that he missed the step.

"The old girl slid over on her right side, then turned completely over, and is still there in the ditch.

"Donahue swears by all the gods that when she felt her trucks leave the rails, she knew it was too late to save herself, but didn't intend that he should go down under her."

"Now, Mike," Thompson interrupted abruptly, "you said there was nothing funny in this wreck."

"So I did, and I didn't see anything funny then," insisted Murphy.

"Well, do you now?" asked Thompson.

"Sure, from the way Jack tells it. But how a fellow can see all these things in the short time that is required for them to happen is what gets me."

"One simply notes these things subconsciously, as it were," answered Thompson. "No one thinks of anything funny at the time the affair is taking place, but all the same he takes in and notes these things without realizing it at the time. It's only after the trouble is over, the wreck cleared away, and the schedule restored that the funny side of the picture comes to the men who faced death.

"Whenever you find a dog-house council or a roundhouse convention in session, it's a dead sure thing that you will hear more or less such yarns," Thompson continued. "I know that there are lots of men railroading who will be pulled out from under a pile of wreckage, perhaps, with a broken arm or leg, and yet who will afterward recollect something humorous about the accident.

"No wreck is just like any other wreck; each one is a law unto itself, and even in these I believe that the man who makes it a rule to look on the bright side of things and to keep his eye open for the laughable features of life, will never fail to find something to appeal to his sense of humor."

"Dixie" Jones

By Horace H. Herr

FIRSTLY, we had a whole train of Joneses at Winslow, and we wasn't feelin' the need of no more of that crew, when "Dixie" drifted in, carrying no signals and all his worldly possessions wrapped up in a red handkerchief

Clem Jones, what had been pulling a throttle on the second district ever since the last rail was spiked, had six foot of slenderness and a sunburnt mustache what drooped like the long whiskers on a catfish, to give him character; Fred Jones, from down Louisiana way, had black hair, bow legs, and a wife to distinguish him from the rest of the clan; while E. A. Jones was from down around Pine Top, in the Ozarks, and didn't know nothing about grammar, and was always saying "totin'" when he meant "carry."

It seemed like nature must have checked short on character when she come to Dixie, 'cause he didn't have no visible brand or number plate to make him look any different from anybody else what hain't got no character.

When he come into Winslow, nobody knew for sure what he was. He hit the trainmaster for a job running train, and, finding the switch closed there, said he'd take a place shagging wild ones in the yards.

When the yardmaster told him he wasn't needing no more Joneses on the switch-crew, he head in on the master mechanic for a place with the hogheads, and finally ended up by being introduced to a scoop.

As a fireman, he wasn't what we'd 'a' called a world-beater, but he got along.

He had a way of getting just so much steam out of all of them; and, while none of the boys came in a blowing off about what a crackerjack fireman he was, none of them ever had to turn him in. By bucking the extra board, he got some of those old kettles what wouldn't steam until you had the paint a meltin' off the sand-dome.

He wasn't nothing like Blim Jones, 'cause he never did drink nothin' but water and coffee, and he didn't take after "Pop-off," 'cause he never had nothin' to say about what he'd done on the Central of Georgia or the Monon.

We couldn't find enough character about him to name him so we'd be able to distinguish him from the rest of the Joneses, till the day the G. A. R. special went over

the pike with a brass band in the smoking-car and a story-telling bee in every coach.

When the special rolled into Winslow that morning and stopped to let the old-timers draw a round of rations at the Harvey House and while the vets were storming the commissary, that brass band got out on the platform and give us a concert.

Them musicians must have been a pumping up their train-line all the way from Gallup, for they started in with "The Girl I Left Behind Me," and played every tune what's been invented since it was, and then they built a few just for the occasion.

We was all so busy a listening to the band that nobody paid no attention to the latest recruit to the Jones regiment until they opened the throttle on "Dixie," and then for a few minutes nobody thought of nothing else.

When that band started up that air there was an old cap went into the air and a yell you could 'a' heard clear to Cañon Diablo; and of all the carrying on with his mouth you ever heard, Jones sure beat it.

He didn't only yell; he danced about, and pounded people on the back like as if he'd gone plumb locoed.

He had character, after all, but it was a way in deep out of sight; and from that day on, when you said Dixie Jones, they wasn't no danger in bein' mistook in who you was referring to.

Before Dixie got through cheering, they was another fellow joined in. Young Mundston, a tallow-pot what got his start down in Texas, on the T. and P.

He and Dixie Jones yelled until we all felt sorry for them and joined in; and besides giving us a really good name for the latest Jones, that "Dixie" piece got Jones a mighty good friend—Mundston.

Mundston was the only son of a real Texan. He wasn't no fellow to fool with, if a fellow had any respect for himself, 'cause when that boomer Dowell said something about any man what carried on over a Confederate war-song was fit to have no rights in the American government, Mundston didn't 'low as how he'd argue the question with him.

He just took him by the slack of the overalls and tossed him off the right-of-way; and then, seeing that they wasn't none of the rest of us what cared to take up the argument, Mundston couples onto Dixie Jones, and they beat it up the street toward the roundhouse.

That same night, we heard some one playing "Dixie" on a fife over in Mundston's room, and by exerting due caution and running out a flag, we was able to get close enough to find out that it wasn't nobody else but Mundston himself, and his audience was this new Jones fellow.

The next morning me and Slim Jones met Mundston and Dixie Jones over near the roundhouse. Slim he tries to hang a new name on the man from Texas.

"High-ball, Fifey!" he called, meaning something like "Good morning" for Mundston.

After we got Slim's head and a raw beefsteak neatly tied up together, we decided that "Fifey" wasn't no good name for Mundston, and we've all called him "Mister" ever since, not paying no attention to the fact that he's the youngest fireman on the division, and some of us fellows being old enough to be his granddad if we'd had the nerve to venture into matrimony.

But it was Dixie Jones from that day on, and he didn't seem to object.

Dixie was just built that way. He didn't find no fault with nobody at no time; and when the train broke in two, the nozzle stopped up, or the mud-ring went to leaking, he just took it as part of the day's work, and never had no hard language for nobody or nothing—and we all kind of got so we liked him.

It was popular sentiment, as Barney Moran used to say when he was speechifyin' during the campaign for prosecuting attorney, what give Dixie an engine when the orange rush come on.

I ain't a saying nothing again' his ability to handle a Johnson bar, either; but it was popular sentiment what got him running an engine.

That season of 1900 we was caught short on eagle-eyes when the oranges began to move; and the Old Man was a hiring 'em right and left, and never thinking of Dixie until, one mornin', I says to him, I says:

"Why don't you set up Dixie Jones?"

Some of the other fellows who had had Dixie swinging a scoop for 'em caught the Old Man, and they all says to him just what I says:

"Why don't you set up Dixie Jones?"

Finally they was just one crew in Winslow for freight service. There was a red-ball orange-train coming over the high-switch from the West, and a drag of coal over the high-switch from the East.

If the coal didn't get West in the next twenty-four hours, the orange-trains and the varnished cars wouldn't have much luck getting East. The Old Man was a tellin' me his troubles, and I says again, I says:

"Why don't you set up Dixie? Give me the red-ball and put one of your wipers on the 660 as a fireman, and I'll guarantee to make the running time with the oranges Take Mundston off the goat for a fireman and set up Dixie Jones, and I'll guarantee they get the coal over to Seligman in time to head off a tie-up."

The Old Man he took to that idea, and he called Dixie for that old battle-ship, the 991. When Dixie, who had been a rooming with Mundston ever since the day following that G. A. R. band concert, reported he had Mundston's fife wrapped up in his overalls.

Of course, he and Mundston didn't have no trouble getting over the road. Pete Boyle, who rode the caboose behind Dixie on that first trip, told me that he handled that train just like an old-timer.

He knowed just when to pinch 'em up and when to let' em roll, and they didn't have to drag a chain over the entire district, which is saying a good deal for Dixie's work when you know the mountains and the hog-backs he had to steam over.

Pete told me they went into Seligman like a passenger-train, everybody feeling fit as a fiddle; and Mundston and Dixie put up at Tim Dowley's place, and Mundston gave a concert recital on the fife that night for the benefit of Dixie, with Pete listening from a safe place in a dark corner of the porch.

It was coming back what taught us rough-necks what we didn't know about Dixie. Afore that we'd just liked him 'cause he was old and harmless, and always good-natured.

We kind of had to admire a fellow who at sixty years of age didn't ask no favors from none of us younger bucks, either in swinging a scoop or keeping long hours, and Dixie couldn't have been a day younger than that, although he'd said "forty-three" in his application-blank.

Coming back, the crew caught a real orange-train. Thirty-one cars, with a nice little schedule to make, and Dixie had a chance to show what he could do, even if he did have the old 991.

They give him a string of waits as far as Riordan, knowing that if he could keep on them, he could make it from Riordan to Flagstaff for No. 4, and Pete said he had to loaf between switches to kill time.

He was on the dot all the way down; and, with the exception of the tank at Bellemont, he didn't make a stop until he came over the ridge and found the red board on him at Riordan.

When Pete went into the box car at Riordan to see what the despatcher had for him, he got a message that wasn't just exactly an invitation to a Sunday-school picnic or a trainmen's ball.

There was a copy of it for Dixie, and the two of them read it over, and Pete climbed onto the engine to be on the spot when they pulled into Flagstaff. It read:

> Set out train at Flagstaff and pick up all the full water-cars there. Take them to Angell. Forest fire reported near Cosnino and Angell is threatened. Instruction on arrival at Angell

"Looks like we're goin' to have a warm time," remarked Dixie as he hustled off.

Pete, what never had no ambition to be a brave fireman, said something that made a lot of noise but didn't amount to nothing; and by that time Dixie had 'em rolling down the hill for Flagstaff.

Pete tells me that when they got down to Flagstaff, the section-gang from east of there was in saying the fire was all along the track, and it weren't no ways possible for no man to get through.

The operator said that he hadn't had no wire for fifteen minutes, and Pete says to Dixie, he says: "Well, what's doin'?"

"We got our orders, sir," says Dixie.

And me a knowing Pete as well as I do, seeing as how we've wrestled drags and red-balls together for ten years, I can just see Pete a climbing up into the gangway and a saying:

"Go to it, Dixie, old scout; I kin ride as fast an' as fur as any hoghead as ever pulled a throttle!"

And by a askin' Mundston about it, I knows that's just what he says exactly, 'ceptin' that he mentioned a certain kind of hoghead, what don't prove that he meant it noways like he said it.

And with ten cars of water Dixie started down the mountainside for Angell, not knowing what was a waiting in the timber-belt, or not sure where No. 4 was, for No. 4 was ten minutes overdue at Flagstaff

Pete told me all about it a couple of nights after it happened; in fact, Pete told all the gang about it when we was gathered down at the lodge-room.

As they neared the big curve at Cosnino, which is about five miles from Angell, it looked as if they was going into the middle of a cyclone cloud, the smoke was that black and a traveling low and angrylike. Around the Cosnino curve they catch the first glimpse of fire in the underbrush along the right-of-way, and by looking on down the only mile of straight track in that neck of the timber, they sees that the rails led right into a tunnel of flame.

"What do you think about it now, Dixie?" asked Pete.

"We got our orders, sir," says Dixie, without looking back.

Another half-mile, and the heat and smoke is a blowing through the cab, and little chips of burning wood is a flying through the air like it was a raining brimstone and fire.

Mundston gets out the water-pail and fills it, and Pete finds that his blue shirt is burning on his back where he can't scratch it. Mundston gives him the contents of the water-pail, and draws another bucketful, which he pours over Dixie, who is a standing up at the throttle looking grimly ahead.

The farther they went the hotter it got. The wood on the engine was a smoking; the frames of them water-cars was a smoking; everything was a smoking.

Dixie's clothes had been on fire in half a dozen places, and his face was breaking out in blisters so fast you could see 'em coming.

Mundston had quit putting coal in the fire-box. It was down-hill, and they would roll without steam; and then, too, if Pete was right in what he said, the fire about 'em would have kept steam in the boiler without coal on the grates, and all the time Dixie Jones was just standing there at the throttle with his hand on the air.

Then they got to where it was nothing but a rip-roaring furnace, with big pine-trees a falling their red lengths every which way, and Pete tells me that he can't stand to look ahead no longer.

There's nothing to see but the red glare. It's so hot he can't breathe, and he gets dizzy and staggers over to Mundston's side of the cab, and crawls in along the boiler.

A minute later he feels a bucket of water dash over him, and he comes out of it long enough to look over at Dixie.

Dixie's face looks like a broiled beefsteak. His iron-gray hair is singed; his old cap—the same old cap what he tossed in the air that day the band played "Dixie"—ain't on his head. It ain't no place—probably burned up

And then Dixie he kind of staggered, all but fell out on the deck, and Mundston dashes a pail of water over him, and he comes right again, and Mundston — well, he's doing noble.

He's from Texas, and them folks down there don't make no fuss when they're against the big works.

They fights, they do; and Mundston was fighting his own battle and a little bit more besides.

Then Pete, he says he sees Dixie motion to Mundston, and he shouts something at him. Mundston dashes a bucket of water onto Dixie, then makes a rush to the seat-box, and Pete says he knowed then that Mundston had gone crazy.

From the seat-box he pulled that old fife, and in all that roaring and fire and such, that man from Texas stood there like the fool boy on the burning deck and played "Dixie."

Pete says, he says to me:

"You never heard 'Dixie' played that-a-way, Jones," he says. "Why, I ain't no hero nohow, but I could 'a' fit heaven an' hell an' the earth, I could. Him standin' there with his clothes on fire, and Dixie Jones standin' at that throttle with his skin a cookin' off his face and blisters a raisin' on his hands, an' me a layin' down there by the side of the cab a whinin'.

"I means to say, Jones, that I riz up and I fills that bucket, an' I goes to work putting the fire out on them two men; and every time I heard that fife screamin' 'Dixie,' I'd yell as loud as I could, 'Go to it, Dixie Jones! I can ride as fast and as fur as any hoghead as ever pulled a Johnson bar!' And we started off and comes through."

There ain't no way figuring how they come through that five miles of flame, 'cause them rails was kinked in places as sure as I'm a foot high.

They ain't no way figuring a thing like that, 'cause the big pine-trees fell toward the track, and while none of them got their trunks over the rails, the tops of 'em was there

They ain't no way figuring it except that "Dixie" music and what the parson said when he came over to see Pete and Mundston in their bad-order raiment.

I was there when he come in, and he says, "Through Him all things are possible," and Mundston found a hole in his bandages big enough to answer, "I reckon you're correct, parson; my mother told me that afore I left home."

"And we comes through," says Pete, and "They comes through," says several hundred passengers what was a cryin' and prayin' alongside No. 4, on the sidin' at Angell, when the 991 and a string of water-cars came out of that furnace.

And I reckon it don't make no difference how the volunteer brigade, including women and children, saved the station at Angell and the Pullmans on No. 4.

Pete and Mundston and Dixie Jones didn't have no part in that, 'cause they picked Pete up off the deck and had to pry his grip open to get the water-pail out of his hands, and Mundston, when Dixie gave them the air, caught him as he fell toward the gangway.

Mundston took Dixie Jones in his own arms, carried him a hundred yards to the box-car station, and threatened anybody with death what dared to touch him, until he had him laying on the operator's bed.

And it was Mundston who was standing over him when he come to for a moment; and it was to Mundston that he whispered: "We've filled the order, boy, and I'm goin' home to Dixie."

But he died, and the doctor said it was because he'd breathed flames into his lungs.

And it was Mundston who raved about it all for a week in the Winslow hospital; and it was Pete Boyle who couldn't talk about it for two weeks; and it was all the Joneses in Winslow that was prouder of their name from that day on.

And to think, when Dixie Jones first drifted into Winslow, we didn't think he had no character.

FREIGHT-CAR POKER.

THE four were looking intently out of the car-window when the uninitiated one entered the smoker. As the newcomer took a seat across the aisle he heard one of the four exclaim:

"Pair of aces!"

"Three four and a pair of sevens," said the man next to the first speaker. Then the third spoke:

"That beats me—a straight."

The stranger had not seen any evidence of card playing—no board, no pasteboards. His neighbors were still gazing out of the window as they gave vent to expressions that were unmistakably pokeresque, while the train wound slowly through the yards nearing the city, and as he studied the group opposite him, he wondered vaguely whether this were some ghost of a card game; whether the players were alive, or—

"Dippy!" murmured the stranger.

A strange gleam came into the eye of one of the men and he exclaimed:

"Four aces! Ha! ha!"

It was a laugh of fiendish derision, such as the uninitiated one had read about in boyhood days behind the woodshed, and now it sent cold chills down his backbone as it used to then. He slunk away into the corner of his seat next the window and gazed furtively at the quartet across the way for a moment until he heard voices again. The voices said in unison:

"Four aces win the money."

There was a clink of coin and the man of the four who had been last to declare his fantom hand reached out and pocketed contributions from the other three.

Presently the four peered out of the window and one of them said

"Let's play draw poker this time, just like the other, only you can discard and draw if your hand isn't good enough to stand pat"

"Holy smoke. This is the limit'" cried the uninitiated one, rushing up to the conductor. "What's the matter in that bunch?"

"Ever hear of freight poker?"

"Straight poker, but 'freight'—never"

"Well, it's getting to be pretty popular for commuters who make short runs and haven't much time to bother with cards and boards and that. There are always trains of freights standing along the tracks most all the way in to the station, and you know, the cars are all numbered. The players just agree among themselves what each car will call 'his' and then play with the car number.

"For instance, if you are playing the first car in each train the next man has the second, and so on. Then, if your car is No. 13355, you have two pairs—threes and fives. The next chap may have No. 27444, and you lose. You see, every train passed is like a new deal. They can only play draw while we are running slowly through the yards. Then they have time to 'discard' and 'draw' from the next string of freight-cars."

"Oh," said the inquirer. And he went back to his seat wondering if his first deductions concerning the four were not correct.—*Chicago News*.

CRACK TRAINS OF AMERICA.

Up-to-Date Palaces on Wheels Making Record-Breaking Runs.

Passenger-Trains, Famous for Equipment and Schedule Time, and the Fast Locomotives that Pull Them.

BY E. L. BACON.

PART III.

HE fastest train on the Santa Fe system is the California Limited. It is, perhaps, aside from being one of the best time-makers, one of the most luxurious trains in the world. The length of the run, Chicago to Los Angeles, is 2,264 miles; to San Francisco, 2,576. The car for San Diego travels 2,391 miles. As the service is daily, and the run about three days, each way, it requires nine separate trains for the service.

Engines are changed twelve times between Chicago and Los Angeles. Between Chicago and La Junta the Atlantic type is used. West of La Junta the Pacific type is used. All cars of this train are built by the Pullman Company especially for the Santa Fe, hence the train is properly spoken of as "built by Pullman."

Steel underframes are used. On the route, the train crosses some pretty high spots. At Raton Pass the altitude is 7,608 feet. On the plains division the speed per hour varies from forty to forty-five miles, and along some short stretches it is a mile a minute.

The Santa Fe was the first line to establish limited train service for southern California. This was sixteen years ago. This service used to be twice a week only during the winter season. It was then increased to three times a week; then put on daily in winter and semiweekly in summer. A few years ago the service was made daily the year round.

The California line now has a double track practically all the way between Chicago and Newton, Kansas. From Newton, the second line leads through Panhandle and to a connection with main transcontinental line west of Albuquerque. From that point the line is being double-tracked to accommodate increase in travel between

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the Pacific coast and the East. The Santa Fe announces that, beginning December 1, it will put on the first extra fare train ever run to California. Their new train will be called the Santa Fe de Luxe. It will be operated once a week during the winter, between Chicago and Los Angeles, via Kansas City and Albuquerque. The schedule will be sixty-three hours between Chicago and Los Angeles. West-bound it will leave Chicago at 8 P. M., Kansas City at 8 A. M., and arrive at Los Angeles 9 A. M. third morning.

East-bound it will leave Los Angeles at 6 P.M., and arrive at Kansas City at 11 P.M. the second evening, and Chicago at 11 A.M the third morning.

An extra fare of $25 will be charged in each direction.

More and more California is becoming the playground of America. Repeated demands of those who have winter homes in California make this extra-fare service a necessity, as the California Limited of the Santa Fe can no longer accommodate all comers.

The Santa Fe de Luxe will be equipped with compartment, drawing-room and observation-sleeping-cars, club-car and dining-car, all newly built from special designs. The cars are of the all-steel underframe type, with wood interior, insuring a maximum of safety, comfort, and artistic effect.

The train will carry a barber, a ladies' maid, a stenographer, and other accessories of high-class service, in addition to the regular train employees.

Bathing facilities will be provided. Market reports and daily bulletins of important world happenings will be telegraphed to the train while *en route*. A library and the current magazines will be furnished.

One innovation will be telephone connection at terminals. The dining and club cars, as usual, will be under the management of Fred Harvey.

On the Salt Lake Route.

Awakening suddenly from a sound sleep in the wee sma' hours one morning during the past winter, a well-known Easterner aboard the crack train of the Salt Lake Route was surprised and vexed to find the train not moving. It was important that he be in Los Angeles by a certain time, and if she went through on schedule, the crack train would get him there. He pressed a button at his side and an attendant responded

"Why is the train standing still, porter?" he asked. "What's the matter?"

"Standing, suh!" responded the porter, in surprise, "standing! If you-all considers going sixty-five miles an hour standing still, suh, you sure are used to riding on faster trains than we have in the West, suh."

That train was the Los Angeles Limited, the pride of every man connected with the San Pedro, Los Angeles and Salt Lake Railroad, and it was traveling across one of the long, level stretches of track between the terminals of the road so swiftly and smoothly that, with the noise of the wind and rain outside, the wakened passenger did not feel or hear her move.

A 781-Mile Run.

The Los Angeles Limited runs solid between Los Angeles and Chicago, via the Salt Lake Route, the Union Pacific and Northwestern line. It is the crack train of the Salt Lake and well deserves that title.

This train is made up of seven or eight coaches of the latest Pullman construction, and is pulled over the seven hundred and eighty-one miles which separate Salt Lake City and Los Angeles by those gigantic monsters of the rail known as "Pacific Type" passenger-locomotives.

Considering the fact that between the two cities mentioned lie three ranges of mountains, and that grades as steep as three per cent exist along the line, and that the limited makes its run in twenty-four hours and twenty-five minutes, entitles it, not only to the honor of being the "crack" of the Salt Lake, but also to a niche in the hall of fame along with other fast trains of the country.

Five engines are used in hauling the limited from Los Angeles to Salt Lake City, four of them being oil-burners, while the fifth, operated from Milford, Utah, to the Mormon capital, burns coal. The giant speed monsters are of the 3,400 class.

They have four pony wheels, six drivers, seventy-seven inches in diameter, and two trailers, and exert a tractive effort of 29,920 pounds. These engines weigh 222,000 pounds without the tenders, and the combined engine and tender weigh 358,700 pounds.

Their fire-boxes are 108 inches by 66 inches, cylinders 22 inches by 28 inches, and flues 2¼ inches by 20 feet long. They carry 7,000 gallons of water, making frequent stops to take on water unnecessary.

Dynamo in Baggage-Car.

The engines which haul the Los Angeles Limited are comparatively new, and represent the most advanced ideas in locomotive construction, just as the coaches which make up the train represent the greatest degree of comfort and safety yet designed and executed by the Pullman Company.

Six of the locomotives were built in 1904, fifteen more were turned out in 1905, while the remaining five—there are twenty-six in all—were built in 1907. They are all alike, the first six proving beyond doubt that this type of locomotive is best for the work they have to perform.

From first to last the make-up of the train is of the best. In the fore part of the baggage-car is located a large dynamo which furnishes electric lights for the entire train. From this, back through dining-car, the three standard sleeping-compartment-cars, the drawing-room and observation-buffet-library cars, an air of quiet, tasteful luxury exists, such as that found only in the finest homes and most exclusive hotels.

The cars are constructed with reenforced steel frames and safety vestibules, and have monolith floors which deaden the sound of the wheels beneath them.

Electric ceiling and side lamps are in each compartment and section. Electric fans whir in every coach. Telephone communications are established with the outside world at every city where long enough stops are made, instruments all ready to be plugged-in being located in the observation-buffet-compartment-car

The sleepers are elegant throughout, each section and compartment being different to a certain degree from those of other trains, and are larger and more comfortable than most.

The observation - buffet - library - car is really the feature about the Los Angeles Limited which places it in a class by itself. Here is a large smoking-room for gentlemen, with a buffet near by for light refreshments.

Periodicals are handily placed on the tables for those who care to read. At the opposite end of the coach is the observation-car, with its massive leather easy chairs and sofas.

A library is stocked with the latest fiction, with the most notable works on travel close by, so that the passenger may never have the opportunity of experiencing a dull moment.

The observation-platform is enclosed on each side and is extra large. With each trip this platform becomes the social center of the train, where many a happy hour may be passed, watching the ever-changing scenic wonders as the train speeds along.

The dining-room is as complete as the rest of the train. Neat, compact kitchens, in charge of experienced chefs; comfortable, well-lighted, and spotlessly clean, it appeals strongly to the most fastidious travelers.

This department is under the direct management of the roads over which the Los Angeles Limited is operated, and the same standards are maintained as in other departments.

In the trip across the mountains from Los Angeles to Salt Lake City, the limited is operated over five passenger-traffic districts, that number of locomotives being used on each trip. Changes are made at Otis, California; Las Vegas, Nevada; Caliente, Nevada, and Milford, Utah. The road-bed is smooth and solid, being covered with crude oil.

The B., R. and P. Crack.

The crack train on the Buffalo, Rochester and Pittsburgh Railway is train No. 3, locally known along the line as The Flier. This train leaves Buffalo, New York, daily, at 9.30 A.M. for Pittsburgh, Pennsylvania.

The equipment, which was constructed especially for this train, was designed with a view to the comfort and ease of the traveling public, without regard to cost. In completeness of detail, artistic taste, appointment and finish, this train rightly takes her place in the aristocracy of crack American trains.

No. 3 is made up as follows: Prairie-type locomotive, combined baggage and express car, day-coach, drawing-room-reclining-chair-car and café-parlor-observation-car.

The day-coach, built on a steel frame hung on six-wheel trucks, is of standard-

wide, vestibuled type. High-back seats, upholstered in soft, green silk plush, a large smoking compartment upholstered in dark green leather, rubber-tiled floors, and walls and ceilings decorated in harmonious tints, all combine to make a coach which for comfort and elegance has few equals.

The reclining-chair-car, also built on a steel frame with six-wheel trucks, is a model of luxury, with standard-wide vestibules; reclining-chairs free to the patrons.

This car is also provided with a drawing-room compartment, much appreciated by bridal parties and those desiring seclusion. A nominal charge is made for the use of this room. The same upholstery and decorative scheme is used as throughout the train

In the rear is the cafe-parlor-observation-car, owned and operated by the Buffalo, Rochester and Pittsburgh Railway. The dining-room seats eighteen people. The meals, served *à la carte*, are the best that an efficient commissary can provide, and prices are extraordinary only for their moderation. Eggs, butter, milk, cream, and fresh vegetables in season are supplied from the Model Farm of the Buffalo, Rochester and Pittsburgh Railway at Pavilion.

The parlor comfortably seats sixteen, and is equipped with revolving armchairs. A roomy observation-platform provided with awnings to keep out the glare and sun, is much enjoyed by the passengers.

The exterior of this train is uniform in its glossy coat of dark olive-green, and, even in this day of travel-blasé public, is commented on for its handsome appearance.

Train No. 3 leaves Buffalo at 9.30 A.M., making its first change of engines at East Salamanca, 62 miles south, at 11.15 A.M. The next change of locomotives is at Du Bois, 98 miles from East Salamanca, at 2.20 P.M. Good time is made on this division, in spite of the heavy grades, for it is said that the Buffalo, Rochester and Pittsburgh Railway at Mount Jewett, Pennsylvania, is the highest railroad in the State of Pennsylvania.

Du Bois to Pittsburgh is the last division, and the 127 miles are done in three hours and fifty five minutes, much time being used in the approach to Pittsburgh.

Train No. 6, north-bound, known as the Buffalo Day Express, is the companion train to No. 3. To maintain these two trains, six locomotives are necessary, and three complete trains. Each train makes one round trip, then lays off one day for careful inspection and complete sanitation, for the safety and comfort of the patrons of the Buffalo, Rochester and Pittsburgh Railway are the first considerations of that company.

TESTED BALLAST FOR TWO YEARS.

THE testing of materials of construction is one of the most important branches of engineering science, says *Popular Mechanics*, for it is often cheaper to devise a special test, even at the expenditure of many thousands of dollars, than to trust to the haphazard and expensive scheme of trial and error

One of the most unique tests of this kind was the one recently carried out by a great American railroad company, to determine the necessary depth of stone ballast for railroad tracks under stated conditions.

A series of experiments extending over a period of nearly two years was undertaken with an apparatus consisting of a piece of track over which was run continuously back and forth, at the rate of five miles an hour, a two-axle truck of nine feet wheel-base and loaded with pig iron so that the gross weight amounted to 150,000 pounds, or 75,000 pounds per axle. The ballast to be tested was placed under the track in three boxes, open at both ends, and after the settlements in the boxes amounted to about one inch, the car was stopped and the track raised to its original elevation by tamping the ballast with picks, according to the usual service methods. After each of the five prolonged tests which were made, the ballast was cut into sections for examination.

The boxes were covered by a roof to protect them from the weather, and water was poured on the ballast at certain times during the test to approximate the effect of a predetermined rainfall. In this way, even the exact weather conditions were made known in determining the effects of the test. The car was operated by an electric motor which automatically reversed at the ends of the track. A speed-counter on the car registered the number of trips, which totaled some hundreds of thousands.

The result of all of the tests was that the committee in charge of the experiments recommended the use of twenty-four inches of stone ballast underneath the ties for existing conditions of railroad work, and under this, a layer of engine cinder, gravel, or an equivalent, to act as an absorbent mat to dispose of the water falling on the track and so prevent softening of the road-bed material

Was Clemmie Kidnaped?

by W. S. WRIGHT

SYNOPSIS OF PREVIOUS CHAPTERS.

AN unidentified baby girl has been left at the cabin door of Ted Maller, a poor miner. Ted adopts the child and simultaneously his luck changes—he strikes a vein of gold which makes him a rich man. After two years, Clementine, the baby, suddenly disappears and Maller receives a letter in which he is informed that she has been kidnaped by her parents. He puts bloodhounds on the trail which leads to his own mine "The Clementine."

CHAPTER V.

Just How It Happened.

DURING the period of time that elapsed between the exact moment that Mrs. Chesley wheeled the perambulator containing Clementine Maller into the Gold Valley dry-goods emporium, and the exact moment that her disappearance was discovered, one of the strangest things happened—one of the very strangest things in all the world.

A young man rode into town on a dilapidated roan horse.

In the flotsam and jetsam that percolated through Gold Valley—from prospectors who had hastened there with but a scant supply of the world's goods to men bent on every crime known to the gamut of criminals—the coming of this stranger was of little import.

But had the casual observer noticed with less than microscopic eyes, he would have seen particularly:

That the stranger wore a black slouch-hat pulled very close to his eyes.

That his black coat was so buttoned as to hide part of the lower section of his face.

That his trousers were of a dark-brown material, and very much worn.

That his shoes indicated close, intimate and frequent connection with the ground, and had for some lengthy period.

That he was of an agile build, muscular and somewhat good-looking, and that he rode the roan horse bareback.

That said horse limped perceptibly, and that its fore feet and one hind foot were bound with gunny-sacks tied with pieces of new bale-rope.

The foregoing were the most noticeable things about the horse and rider. They were sufficiently odd to have attracted some attention, one would think, but as I have said, so many of the odd characters that blow into a mining camp—and blow out again before they have had time to say "how-de-do!"—drifted through Gold Valley, the coming and going of this mysterious stranger did not raise more than an ordinary ripple.

In fact, when the entire town was thrown into a state of excitement over the disappearance of the little girl, none of its in-

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habitants could clearly remember ever having seen him or any one else who was an unknown

So entered into Gold Valley that day the real father of Clemmie Maller.

His name was Harry Pinter. His wife was a struggling young woman who had come with him from the East.

In the little railroad town Twin Oaks, situated twenty miles from Gold Valley, they had eked out a precarious existence.

He did all manner of odd callings for starvation sums; she took in washing.

He struggled against adversity and luck and got the worst of it every time he went to bat; she cooked and sewed and worked her once delicate hands to their limit, hoping all the time that their long lane would some day turn into brighter and more productive fields.

But with all their hardship they loved each other, and their greatest joy was to share with equal fortitude the burdens that beset them. When Clemmie was born, a new and greater love seemed to have come into their lives, but the long illness that attended Jane Pinter, and the desperate struggle of her husband to keep the wolf from eating them alive was an adversity that few could withstand.

Then, to make matters worse, Twin Oaks was not even assuming the proportions of a decent boom town. The residents did little for it; the railroad did less, and the more ambitious of its people departed to the mining camps that abounded in the wilderness around in all directions as fast as they could gather sufficient to support them on the journey

The result was that Twin Oaks at the time that this narrative tells about was reduced to a hybrid bunch of careless humanity who hated the sight of one another as a bull hates a carmine shirt.

Gold Valley had little or no use for the place. It looked upon Twin Oaks as a tail-ender in the race for civilization honors, and the twenty miles of mountain roadway that separated the two places might have been a thousand for all Gold Valley cared. Consequently there was very little communi cation between them, and absolutely no social mixture.

Jane and Harry Pinter did not abandon their baby for any selfish motive, nor because they were unwilling to battle for its existence even against greater odds than assailed them.

They abandoned her because she needed what it was absolutely impossible for them to give—proper sustenance.

Poor medical attendance, a broken-down system and lack of nourishment had rendered the mother unfit to be a mother, and rather than see her baby shrivel up and die for want of food, she agreed to abandon her to some one who seemed to be human in an inhuman world.

Poor little woman! She had stayed awake nights turning the problem over in her mind, while "Baby," as father and mother called the mite, laid at the foot of the rude bed, her little hands getting thinner every minute, her tiny face seeming more peaked, and with such a wan, hopeless look!

The mother could stand it no longer.

"Harry," she said to the downcast husband one morning as he was starting in quest of work. "Harry—I hate—I hate to say it—but we must do something for Baby."

"Aren't we doin' the best we can?"

There was just a touch of impatience in his voice. She was sure she had never heard him speak that way before—yes, she was quite sure. His back was to her and she did not see the firm expression of disgust that set his face, nor did he see the tears that mellowed her eyes.

"We *are* doing the best we can, Harry," she replied, as always, in the sweetest, kindliest tone, "but—Harry, dear—Baby is —she is starving."

Jane Pinter bit her lip and drew her hand across her eyes to hide her tears.

She made a mighty struggle to sit up in bed—to prop her frail body higher against the pillows—but she could not. She could only lie there on the flat of her back and watch the shuddering form of her unfortunate husband and hear the faint cry of the little one.

Anguish rent her soul as a mighty flood rents a valley. It was pitiful to hear her cry; more pitiful still to see her weakened body tremble when she sobbed.

Harry stepped to the bed and took her in his arms. He smoothed her cold, perspiring forehead and brushed back her hair. Then he kissed her in the same old tender way and otherwise assured her that he was then more than at any other time since their marriage—her husband.

"Jane," he half whispered, "you say the baby is starving."

"Yes. Look at her. I have known it—

for—oh, for a long time. I could see it coming. She cries so seldom now, and so feebly. I don't see—oh, Harry! I don't see how we can keep her any longer. I—have—"

Whatever she wanted to say was lost in a burst of tears. Then she grew weaker and sunk in his arms

Harry placed her tenderly on the pillows—brown from constant use, and musty for lack of being aired—pulled the covers up to her chin, and, petting her gently, sat down to think.

He thought quickly. A problem oft puzzled over racked his mind: Which shall it be—the mother or the child?

The more he thought, the more he puzzled. The deeper he went into and over every detail of their existence, the sooner he came to the conclusion that the little wife was right.

When she regained strength and courage she again took up the subject.

"It will surely kill me, Harry—surely—to lie here and know that she hasn't the food she needs. It will prey on my mind till I go mad or die."

"But, Jane, where can I take her? There isn't a public institution within miles—just where, I do not know. And if I did, where could I get the money to make the journey?"

Then Jane aroused herself for the final blow. She mustered all her fluttering courage for the real meaning of her words, that Harry might have no further occasion for idle discussion and foolish questions.

"Harry." She gripped his hand tightly and looked steadfastly into his eyes. "Harry, we must—we must abandon her!"

She didn't falter; she was brave!

"Jane!" he choked.

The silence gave him time to think.

He wiped the jutting beads of sweat from his face with his shirt-sleeve, and waited for her to regain her speech.

"It's a terrible thing to say, my darling; it's terrible to think that a mother would have such thoughts for her baby—but—oh, Harry!—I can't—I can't think of leaving *you!*"

He held her still closer as she wept.

"I love you so, Harry! I love you so!"

"I love *you*, my darling," he replied.

As he spoke he pressed her tighter to his breast—so tight that she thought she would be crushed. Again there was a long, unbroken spell of silence.

The little tragedy was too much for him to master. He had played tragedy all his life in the very midst of that great compound where

> All the world's a stage and all the men and women merely players.

He had played it amid its most calamitous settings, but here, in his own home, was being enacted a drama in which he seemed perfectly hopeless to play a part. He could not speak a line until she had given the cue.

"You must find some one who will take good care of Baby!" she said.

"Who in the name of Heaven in this dump will do it?" he asked.

"Not here, Harry. Not here. I know the people here too well. They would not take her, and they would treat her cruelly if we left her on their door-steps."

Pinter looked contempt as he thought of his neighbors.

"You must go somewhere near by, Harry, and locate some one who will be kind and gentle to her—some one who will give her a good home. Be very careful, Harry. I wish I could go with you, but I'm too weak."

"I don't know any place nearer than Gold Valley," he replied. "That's a real prosperous town—I have often wanted to go there myself. Crane's Junction is farther up in the mountains—about forty miles. Washout is further still."

"I would try Gold Valley—first," said the wife.

"Jane, is this right? Is this right that we abandon this baby that we have brought into the world? Is it fair to her? Aren't we opening ourselves to—to criminal proceedings?"

The look of hopelessness and despair on the woman's face was her only answer. Just at that particular moment she was too weak for words. She was breathing heavily, for the struggle to transmit to her husband the plan that she had taken so long to build up was more than she could stand.

CHAPTER VI.

The Thief in the Night.

HARRY PINTER resolved to make the trip to Gold Valley the next day. It was plain to his eye and mind that Jane was in a worse way than he really imagined, and that the only hope for saving her life

and bringing back her strength was to accede to her wishes. Baby, too, was becoming more and more feeble.

The moment for action had arrived; he was on the firing line of destiny. The few pennies in his pocket would be sorely needed for food for the wife. The double problem faced him of procuring food for both—and at once!

Perhaps if there had been work in sight the worst would not have come to his mind, but Jane must have food and the baby must have milk.

He could buy Jane what she needed for a day or two—but there was no way to get the baby milk—except to steal it!

This came to his mind like a flash.

It was wrong; it was despicable. He might have begged it, but he could not go from door to door and let his uncharitable neighbors refuse him.

He could not muster up courage to ask them. He knew that he would be refused. He knew, too, that the women would make unkind remarks about Jane, and the men would insult him and tell him to "go to work."

In all his life he had never done a dishonest thing. Now it seemed so easy. It would overcome the objections and save a lot of time and trouble.

Yes, he would steal the milk.

So that night, after the populace of the luckless township was safe in slumber, Harry Pinter stole out of his house, bucket in hand, and made his way to the railroad tracks.

About a mile or so from Twin Oaks lived a farmer who owned two cows. At night they grazed or ground their cuds in a corner of a scant pasture close to the tracks. The fence that separated them from the right-of-way was quite informidable.

Pinter knew just where to find the cows. In half an hour he had reached the farm.

He stood on the ties for a moment and looked around him. There was no sign of life anywhere save the bovine activity of the kine.

In the paling light of the stars, he could see them very close together. He scaled the fence carefully. The cows started at his approach.

After a few moments of parley one let him come close. The other emitted a long, low "m-o-o." It echoed through the hills, and Pinter feared that the farmer might come to investigate.

He listened, ready to drop the bucket and run—but only silence.

When Harry Pinter again scaled the fence and started for home along the railroad tracks, both cows had been milked to the last drop.

He trudged home with a large bucket quite filled with fresh milk, heavy at heart and quite ashamed of himself. Time and again as he covered the distance to Twin Oaks, he wished himself back on the other side of the thin line that separates honesty from dishonesty—but the deed was done.

On the other hand, the baby would thrive on this—and Jane should have some, too!

And why!—why send Baby away at all! Why part from her, when these cows were so handy and so tame, and the acquisition of their milk so easy! It seemed too good to be true.

Thinking over his good luck shortened the distance between him and his shack; then it came to him like a flash that he could not repeat the theft. In the morning the farmer would know that his cows had been milked, and a watch would be set to apprehend the guilty person.

So his beautiful dream tottered about him like falling snow. He was a fool! Come what may, he would never again take what did not belong to him.

During his absence at Gold Valley, Jane, nursing in her heart the great sacrifice that her husband must have made to get this bountiful supply of sustenance for their little one, fed it to the baby as often as her strength would allow. It was none too easy for her to get on her feet, warm the milk and give it to the child, but, as we all know, even in our weakest moments we seem able to cope with our greatest misfortunes.

Jane had said good-by to Harry in the midst of tears. They had gone over the miserable situation in which they were imprisoned, pro and con, minutely and unto its smallest details.

To give them every credit, they tried to overcome the inhuman plan that the wife had designed and the husband was about to put into action. But Jane was so weak and wan, so far gone in health that it was a sin to ask her to care for a baby, and Harry was facing such a struggle that death seemed preferable to life.

There was nothing else to do.

Harry wandered into Gold Valley. He idled about town like a common bo. He

strolled up and down the main street scrutinizing faces and studying humanity, wondering in his half-baked way which were the people of kindly hearts and which were those whose hearts were as flinty steel.

Then came a question that had not blocked, heretofore, the main line of his thoughts.

Which should he leave Baby with—a man or a woman? A woman, of course! Didn't she need a mother's care?

Then he tried to separate the sheep from the goats, so to speak, so far as the feminine population was concerned. Harry Pinter found that he had tackled a problem that was altogether too much for his limited mental capacity—and, perchance, for the mental capacity of greater minds than his!

One woman looked cross, another peeved, another too gay, another run down, and many seemed to Harry to have sufficient children of their own without being burdened by an unexpected addition.

Perplexed and bewildered, he set the women aside as impossible. If this cruel change had to come to his little one, she would be abandoned to a man. After all, he surmised, men know just as much about children as women—perhaps a little more

With these thoughts skipping hither and yon through his mind, he drifted into that part of Gold Valley dignified by the title of "residential section."

It was just that hour of early evening when the sun was reddening the fleecy clouds that tipped the western peaks, and a cool, pine-scented breeze was blowing up from the lowlands.

The miners and the storekeepers and others of the male variety were wending their homeward ways, each with a hearty appetite for the succulent cabbage and sizzling potatoes and sow-belly that filled the air with their combined and inviting aroma.

The more this appetizer got into Harry's nostrils and down into his stomach, where it tickled his gastric juices into action, the more he wished that some one would take pity on him and pass him a bit of hand-out.

Why should there be so much in the world for some and so little for others? Why was the division so unequal? Why did the world insist on owing him a living?

While trying to master this trio of misunderstood quibbles, Harry Pinter stopped in front of the cabin of Ted Maller.

Ted had already delivered his stock of goats' milk to his several customers, had sliced a potato and some bacon, and was sitting in the doorway waiting for them to fry to a state of edibility.

He noticed the dilapidated man as he approached, and was quick to perceive that there was something on the wanderer's mind. Perhaps he—Ted Maller—might some day be in the same predicament, and there would be none to give him food. A man might want clothes and homely advice and other essentials of life, but it was worse than disease to want food—and this wandering being was hungry.

His face showed that, or Ted Maller was a triple-expansion chump.

"Evening,'" said Maller cheerfully as Pinter came along the walk.

Pinter returned the salutation half-heartedly, in a whisper.

"Come a long ways?" asked Maller.

"Some distance," said the other.

"Well, there ain't much doin' about here lately," Maller went on, thinking that the stranger was hunting work, "most of the mines are runnin' full-handed and the others aren't putting on new men. I hear, though, that there's been some new diggin's opened at Washout. Might have a chance up there."

Pinter nodded, and out of sheer fatigue at having encountered what seemed to be a real human being, he leaned against the cabin for support.

He smiled because it seemed that his quest was turning out better than he had anticipated.

Maller noticed the stranger's action. He would not turn a hungry man from his door when there was food to spare.

"Better come in and have a bite of supper," said Maller.

"Thank you. I will if—if you want me to."

"Come on."

Maller rose and showed the way. He pulled up a chair at the table and bade the stranger to sit. Then he turned the bacon in the pan, cut off five more good slices from the main hunk, dug out two more potatoes from a box that contained nails and hinges and a tin of tobacco, and many other things—and soon the room was filled with the prospects of a feast that seemed to Harry Pinter to be the banquet of a Roman.

And to add zest and plenty, Ted made a pot of coffee and set out the tin of hardtack.

It was, indeed, a glorious spread. Just the sort of spread which goes down better than a Broadway banquet, for the appetite had been tingled by the ozone of the mountains, and it's just plain, clean food, and it tastes good.

But ere Harry had put the first mouthful of the bacon and potato to his lips, he felt a strange, choking sensation. For some reason or other he was unable to swallow.

The thought of poor little Jane lying way down there in that miserable shack at Twin Oaks, trying to keep the life in her body and in Baby's tiny body as well, was more than he could stand.

He let the knife and fork drop on the table, and his head quietly went over on his arm and he wept like a child.

Ted bent over him kindly and stroked his trembling shoulders. His great heart went out to the wanderer; he wished that he might know the secret that brought those tears.

And the weeping man wished that he might tell it. Never before, so far back as he could remember, never before even in his own family at home, had he known such absolute kindness.

He wanted to tell his host everything—everything connected with his visit to Gold Valley, but he feared that such an awful truth revealed would result in his being justly turned from the door and driven from the borders of the town.

"Buck up, old man. Food's gettin' cold."

Harry drowned his sobs, apologized in his crude way for being overcome, and bent to the meal.

He ate slowly, but ravenously, without saying a word. Ted saw that his plate and his cup were filled so long as the repast lasted, and he brought out the little kerosene lamp that there might be more light.

When the supper was over, Ted Maller insisted that Harry Pinter stay all night. Harry tried to set aside the proffered kindness, saying that he was used to the roadside and preferred to be on his way, but Ted would not think of letting him go.

However, he begged to be allowed to start early in the morning, that he might be well on the road to Washout before the end of another day. Ted, of course, could not block such glowing ambition, and told his guest that he would be up at sparrow-peep and would start Harry on his journey after a good breakfast.

But Harry could not sleep. He felt more guilty then than he had felt after stealing the milk. He wanted to start back to Twin Oaks and tell Jane of his good luck—tell her that he had found a home for their baby, and that he had discovered a man who could be trusted with the care of their child.

When he did say good-by to Ted Maller they shook hands in the warm masonry of the West. Under Harry's arm was tucked the entire strip of bacon left from the evening meal, and a dozen of the hardtack.

Maller pointed out the route over the mountain that would put him on the right trail to Washout, but as soon as Harry was out of sight his eager heart outran his hastening footsteps in the direction of Twin Oaks.

He wanted to bring to her the good news and the glad tidings, and the bacon and the hardtack, and his love!

CHAPTER VII.

Good-By, My Baby!

THE following night was chosen for the consummation of the abandonment It was a bitter undertaking, and, perhaps, it never would have come to pass if Jane had not seemed much worse after her husband's absence.

True, the child had picked up considerably. The milk had given her new life, and Jane had guarded it so very carefully, not daring to take a sip herself lest the baby be deprived.

. Jane had grown perceptibly weaker. She seemed thinner, and she coughed more, and when Harry folded her in his arms to tell her of his adventure, she was limp and weak.

"You're sure he is kind—that he has a heart?" she asked feebly.

"I'm convinced of that, Jane. I never presumed to judge any woman but you, but I am certain that this man is square, honest, and human. His heart is as big as himself. Why, look what he did for me! I feel as if Providence sent him to Gold Valley just for us."

Much of the long story she did not hear. She was too weak. Much of the splendid picture slipped her mind.

She was worn with fatigue, and a fever was setting in. Under the circumstances it was the only thing to do. Great Heavens!

If he could only find work! If he could only make sufficient to support his wife and child! That was all he asked in the great, wide world! Work! work! work!

Why in the name of all that was good must he now do this awful thing—compared to which the theft of the milk was a petty pastime! Why must he be driven to such desperation when the world was so full of plenty? Was he about to commit a crime, or was he doing an act for which God would ultimately forgive him?

For a little while the woman on the bed did not move. Her breathing came so faint and scarce that he was filled with sudden fear. He bent over and kissed her again and again, and this manifestation of his love resuscitated her for the moment.

"Oh, Harry," she murmured, "I feel so bad. I think I'm going to die!"

"You're not, Jane! You're not! Look, darling, I'm going to take the baby away to-night to that man's house! I will come back to you soon. You must be strong, for I'm going to make you well."

"When—are—you—going—to — take—her?" There was a gasping pause between every word.

"I shall leave to-night, at midnight. I can make Gold Valley by sunup."

"Oh, it will be so hard to part from her—so hard," said the woman.

"It will be hard," he answered.

"And when we want her again, we will go and bring her home—you will, won't you, Harry?"

"When you are well; when my cursed luck changes; when I can make enough to keep us from starving!"

He brought his fist down on the table in a gusto of emphasis.

Jane Pinter clutched feebly at the bedclothes and began to weep. Slowly she pulled the counterpane over her face, as if to shut out some awful sight

Harry, in his blindness, knelt at the bedside and tried to pray. He tried to find within his bursting brain some words that were fitting to offer up to Heaven for the protection of the child he was about to abandon, and for the recovery of the wife whom he loved so dearly, but his mind was a vacuum.

He had not prayed for so long he had forgotten how. All that he could cry out in his moment of misery was: "God be merciful to me, a sinner! God be merciful to me, a sinner!"

He rose to his feet and pulled the bedclothes from his wife's face. She had passed into a doze.

He warmed some milk and fed the baby, who had become so animated that she could indulge in many outward signs of happiness. All that day he spent in caring for his wife and child, save for a few hours in the afternoon, when he went out in search of work.

Then he was met by the regulation rebuffs and refusals. Once he appealed to the foreman of a dinky sawmill on the score of his wife's illness and his baby's need of food

"Don't come any of that guff on me," said the foreman. "Beat it, or I'll feed you to a horse!"

And so he passed on.

Midnight approached. Jane Pinter was sleeping fitfully, waking now and then with fretful starts, only to drop again into troubled slumber.

Baby Pinter, primed with the last bottle of the stolen milk, was also sleeping as babies should sleep at the midnight hour.

Harry Pinter had just awakened from a repose that could not be dubbed sleep.

The worn clock on the box that served as a center-table told him that the hour for his departure was but thirty minutes off. He stretched himself, washed his face with cool water, combed back his disheveled hair, buckled his strap more tightly about his waist and went to the bed where mother and daughter were reposing.

Taking the child in his arms, he kissed her as tenderly as if she were a rose petal, lest she awaken.

The time had come to say good-by. Jane must share in this sad farewell. He sat on the bed close to her and put his hand on her shoulder. She did not move. She was sleeping very soundly.

Perhaps it would be best not to disturb her. Perhaps it would be best to spare the sick woman this harrowing scene and permit her to awaken in the morning and find the baby gone and imagine that a fairy had come in the night and spirited her away.

Perhaps it would be best for him to come home and say that the baby had gone and that she must be brave and strong and not worry, for it was in kind and gentle hands.

He took this view of it. Who shall say that he acted wisely or unwisely? He dreaded the terrible climax when he should close the door behind the weeping, dis-

tracted woman and flee into the night. He knew that when the final moment came she would not be able to control herself.

Underneath the bed, in an old valise, they kept the scant extra clothes of their wardrobe.

From this valise Harry extracted the only other shirt that he owned—a red garment with white buttons, very thick, and woolly, and warm.

He unfolded it and placed it on the bed, then he lifted up Baby and laid her on it so that only her little head appeared above the red garment.

Then he wound it round her tiny body—he wound it so that her little feet and her arms were as snugly encased as if she were a papoose in a blanket, and one of the sleeves was left untrammeled as a covering for her head when he would deliver her finally to her new parent.

From somewhere he took a long piece of white twine. With this he bound his living package—and the knots were too tightly drawn ever to be undone by hand.

During the preparation for her sacrifice Baby awoke. Refreshed by long slumber, she cooed with joy.

All was ready for the long journey.

It seemed a shame to take her away without letting the mother have a chance to press a kiss on the little face, but Pinter could not do otherwise.

If Jane broke down he could not carry out what she wanted him to do, for his heart, too, was wrought up to a point where it would brook of no sentiment.

If this thing had to be done, it had to be done—that was all.

He took Baby in his arms and bent over his sleeping wife, and let the child's face touch hers. He thought that Jane moved just then—but all was still.

His coat and hat hung on a near-by hook. He put them on. Taking the little child in his arms, he blew out the lamp, opened the door, and made for the road that led over the hill and through the cañon to Gold Valley.

CHAPTER VIII.

Between Midnight and Morning.

HE knew every foot of the way He needed no lantern to guide his footsteps. A crescent moon, high in the glinting sky, made the path clear and brought to his vision the tips of different pine clusters and the peaks with which he was familiar, and which told him of distance covered and distance yet to walk.

With an eagerness that bespoke agility, and a determination that meant daring, he walked on and on, clambering down the hillsides to make the cut-offs that shortened the distance, and walking over temporary bridges with the surety of a cat.

Perhaps no other man ever walked swifter, with more energy or with surer foot. His precious burden gave him no trouble. Baby was resting upright in his arms. If one position tired him he would put her in another, but he found that he could carry her easily by putting her in the hollow of his arm.

If she slept all the way, all through the long hours of that march, he did not know. He only kept on and on, resting very little and only when fatigue was strongest upon him.

Gold Valley boasted of no street lights, but it had more than one all-night "joint," where the "sports" gathered. When Pinter saw the lights of these places gleaming down the cañon he knew that he was getting closer and closer. The brighter they burned the fewer were the footsteps before him.

All he wanted was to be certain to reach the door-step of Ted Maller's before the break of dawn.

The long journey home, which he would have to make immediately after he abandoned—the word now made him cringe—his baby, had no fear for him. He would get into the woods as soon as possible and get a few hours' sleep before tackling the return trip.

Gold Valley now lay almost at his feet

He hastened his pace. He was still strong. He was now on the county road, and keeping his gait.

At length he crossed the last bridge, and was on the main street of the town. A few drunken miners saw him, but gave him no heed. He walked along and, finally, he climbed the hill to Ted Maller's cabin.

Stopping abruptly at Maller's door, Pinter gave himself no time for contemplation.

He looked around nervously. He thought he saw forms in the shadows made by the waning moon, and once his nerve almost left him. But only the crickets and the frogs and the occasional wail of a "lit-up" miner broke the stillness.

Gold Valley, otherwise, was asleep.

He held his little child at arm's length.

She was awake and smiling, and he could just see that her eyes were open.

Harry drew her to him and kissed her all about her little face, then he pulled the loose sleeve over her head and laid her tenderly on the miner's door.

"It is for the best, my baby," he said, in a tearful voice. "God take care of you and bring you luck. I will surely come back for you some day."

He started down the hill feeling like a murderer.

Twice he looked back—and the red bundle was still resting against the door. He hesitated—he couldn't—no!

He glanced toward the eastern peaks. Above their crest a pale green streak that was growing brighter and more glorious with every fleeting footstep that he took. From distant corners chanticleer proclaimed the dawn, and Pinter knew that it would not be long before his little girl would be found by one who was a man—aye, more a man than he!

CHAPTER IX.

As in the Beginning.

IN the two years that passed—the two eventful years in the life of Ted Maller—told in our early chapters—during which time the little heroine of this story suddenly passed from the grub state of Baby Pinter to the butterfly atmosphere of Miss Clementine Maller, many things happened to her real parents—many things, I regret to relate, that brought more of the shadow than the sunshine of life.

While the baby brought luck unaccountable to the Maller household, her going seemed to have taken with it what little good fortune the Pinter homestead possessed.

Mrs. Pinter went from bad to worse. The fact that she had "been obliged to abandon her baby," as she said in her heart, often preyed deeply on her mind.

She was tormented by a thousand fears lest some terrible punishment befall her for being guilty of an act that was both inhuman and unmotherly.

These torments did not help her to get well. In a short time she became an invalid scarcely strong enough to leave her bed, now and then able to sit on her porch when the sun was warm, but too weak to work, too far gone to aid Harry in keeping food in their starving mouths.

At one time she got so low that he journeyed all the way to Gold Valley to beg the services of old Doc Quimby, but that eminent medico, realizing that a fat fee awaited him every time Clemmie Maller sneezed twice or gave signs of a spasm in her little toe, was as distant as an eminent medico can be.

Not dreaming that Clemmie's own father had walked those weary miles to ask him to come in attendance on Clemmie's own mother, he was short of answer and haughty of mien.

He "could not come immediately," but in the "course of a week" he anticipated a "business call to Twin Oaks," and then he "would not fail to see Mrs.—er—Binter."

Accepting Harry's diagnosis of her symptoms, he took some powder from a drawer and told the heart-broken husband to give her one every hour "until relieved."

Harry said that he was unable to pay a fee, and Doc Quimby replied that his bill would be sent after he had made his professional visit.

Every time that Harry Pinter secured a job in those two years, he went at the task with a will. Every cent that he earned went to keep his invalid wife in food and shelter, and with every new employment he showed an unalterable willingness to be kept on—but the bottom had dropped out of Twin Oaks.

Of all the "jay towns," it deserved the favored spot on the map.

The news of Clemmie's good luck came to her father and mother on speedy wings.

They nursed every spreading report of their little baby from the morning that she was found.

They thanked Heaven a thousand times for her good luck and the good luck that she had brought to her benefactor.

They reveled in the fact that she actually owned the splendid house in which she lived, that she had two nurses, and a specially imported cow, and chickens to supply her with fresh eggs.

They were happy when they heard that she had everything that money could buy, and on the other hand, wondered if she would have lived at all if she had been subjected to the squalor and poverty which clung to them with the grip of death.

As they had never really named her, they called her Clemmie whenever she was the topic of their conversation. That was the name by which she was known far and wide, and that was the name they, too, would give her.

One day, as Harry was passing the sawmill, the foreman called to him. He had been hunting work on some neighboring farms, and had met his usual jinx.

Walking home to seek solace beside the patient invalid who bore his name, he was thinking deeply, when the foreman's voice woke him from his drab meditation.

Harry never liked the fellow. He was big and burly and took special delight in making every answer an insult. Harry had resolved never to appeal to him for work again; but this time Mohammed had come to the mountain.

One of the drivers of the teams hauling lumber from the sawmill to the loading switch had tired of Twin Oaks and departed.

The foreman offered Harry his place at eight dollars a week. The other man had received ten, but the foreman knew that Harry was starving and that he could save two dollars weekly on that account.

Harry could scarce believe that what the foreman offered him was true. He jumped at the opportunity, and without hurrying to Jane with the good news, he went straight to the stables, hitched up a team, and began with the most satisfied air.

That night there was great rejoicing at his shack. Like all men who want to work, Harry proved that he was the right man in the right place.

The eight dollars came regularly, and the foreman showed no signs of putting another in the young man's place.

He had held this position for about six months, during which time Doc Quimby had made several calls, shook his head silently after examining the wife, and had left some more powders that brought her little or no relief.

But now that Pinter could count on a steady wage and look the world squarely in the face, he began to act for himself!

There was something that Jane needed more than all else in the world! There was something; aye, there was one thing that would bring back her strength, and that one thing was her baby!

One night Pinter sat in his accustomed place by her bedside. The lamp was burning low so the light would be restful to her eyes. The window was open, and the soft scented air of the mountains was wafting in.

Harry took her hand in his and stroked it tenderly; then he leaned over and patted her face and kissed her.

"Jane," he said at length, "I've been thinking. I've been thinking that perhaps we had better get Clemmie back."

"Oh, Harry," she answered, "could we? Could we? I have thought of that so many times, but I hardly dared to tell you."

"I dared not speak of it to myself," he continued. "I have been with my nose to the grindstone for so long that I often wondered if we'd both be better off dead. But now I am working, and it is different. There's something I've been thinking about pretty much lately."

He hesitated, and she urged him to go on.

"If Clemmie is responsible for Ted Maller's luck—as he openly claims—why couldn't she bring luck to us?"

Jane smiled feebly. To her, luck was one huge joke.

"If she has been such a mascot to him, why wouldn't she be a mascot to us. I think that we were foolish ever to have let her go."

"How do you know Mr. Maller will give her up?" asked the wife. "He has adopted her legally. He has made over certain of his property in her name. He would deny your right to her."

"She is our child, Jane. We have the first claim on her as her parents."

"That may be, Harry, but you must remember that we abandoned her. We are guilty of having denied her right to live with us; we did not care for her as a father and mother should; we left her to the mercy of the world."

All this puzzled the man. He could not understand why any argument touching his moral turpitude should be advanced.

Clearly, the child was theirs. That, Mr. Maller would not and could not deny. That Pinter had given her away when all the world was on his back, when the skies were pouring the rains of poverty on him, when hope was a withered weed, and his wife was starving for food—that he had given her away in such an hour seemed no argument against him having her now.

And have her he would!

He realized that Maller would not listen to him.

Even if he brought to his mind the memory of the night when he took him in and fed him, it would be of no avail.

Clemmie was to Ted Maller what the sun is to the rose, what the moon is to the tide—and Ted was to Clemmie a very important factor in her future.

As the days wore on and the Pinters talked more and more about Clemmie, Jane was steadfast in her belief that Harry could not secure possession of the little girl without a terrible legal fight—a fight that was too grave and important for the district court of Gold Valley.

He finally decided that he would kidnap the child

If successful, he would be in possession, and that meant nine points to the good. If unsuccessful, he would put up the best possible battle that a father could make for his own.

Fortunately for his plans, he selected the day that Mrs. Chesley chose to invade the bargain-counter.

The roan equine was a spavined animal belonging to the sawmill people. He was useless in harness, but had a good gait in the saddle. Despite the bony enlargement on his hock, he was able to do an occasional sprint that was startling

Determined to carry out his purpose, Pinter kissed his wife good-by, told her to await his coming, and went to the sawmill stable.

He led the roan horse from his stall, forced a bridle over his head, and the steed was ready.

Pinter gathered up half a dozen gunny-sacks and as many pieces of bale-rope. He returned to his shack, donned his oldest shoes, trousers, and coat, tucked sacks and bale-rope under his arm—and mounted.

The old roan was walked all the way, for Harry wanted its strength for the return journey.

When he had reached a spot about a quarter of a mile outside Gold Valley, he looked round about as he pulled the roan into a clump of bushes.

There was no one in sight, so he began the most important part of his entry into the mining-camp.

He realized that bloodhounds might be put on his trail, and in order that it be covered as much as possible, he bound the forefeet and one of the hind legs of the horse with gunny-sacks.

The uncovered hoof was the spavined one. Harry figured that the horse pressed this particular foot so lightly on the ground that it would make no difference!

As he rode into Gold Valley, his easy air and wobegone appearance were his best assets.

Had he been noticed by any one, it was only with the thought that he was a wandering prospector, broke and forgotten, with whom it were better not to get acquainted.

But he had not ridden far into town before he noticed Mrs. Chesley wheeling Clemmie's perambulator down the main street.

Surely from the size and gaudiness of the go-cart and the air of the woman at the handle, the occupant could be none other than his baby.

He pulled in the roan to a slow walk and watched the coming perambulator.

He saw Mrs. Chesley turn into the dry-goods store.

Soon after Pinter had pulled up and dismounted. The roan would stand unhitched.

He entered the store unnoticed. Women were struggling to get closer and still closer to the counters. There were but few men anywhere.

He spied the carriage. He stepped up to it idly.

There was Clemmie! There was his own baby, regaled as if she were the daughter of a magnate!

Pinter didn't go into a spasm of delight. He didn't cry out and utter loud platitudes over his long-lost child!

He simply stood aside for a moment—a brief little moment—and waited his chance.

It came before he anticipated.

It seemed as if every woman in the store was clutching madly at some unseen object in front of her. All were oblivious of everything save the rip of the remnant, and the clerks were so busy with their scissors and tapes that they had little use for either babies or kidnapers.

Pinter looked at Clemmie. She was trying to insert her pudgy finger in her dolly's blue eye.

Ere she knew it, she was lifted from the carriage—finery, dolly, and all—and wrapped in the moth-eaten, sun-stained coat of her father.

She was about to make a little outcry when his hand gently stopped her puckering lips.

What followed was always a hazy dream

to Pinter. With herculean strength and a speed that was a little short of marvelous, he dashed out of the store and was beside the horse.

Holding the child tightly to his breast he mounted, jabbed his heels into the animal's flanks, and turned into a side street.

This thoroughfare was a block below the main street and led out of town in the same direction.

It was chiefly used by heavy teams hauling ore. Once on this thoroughfare, Pinter informed the roan that he would have to move, and, spavined hock, gunny-sacks and all, the horse started down the road at a clumsy but lively clip.

Pinter urged him on and on until a good four miles had been made, then he let the suffering brute walk, and uncovered Clemmie that he might have a better look at her.

My! but she had grown and she was pretty!

She looked up at him and smiled. She wasn't the least bit afraid.

It made Pinter very happy, and he hugged the little girl to his breast and kissed her velvety face and marveled that he really was her father!

When half the journey was covered he stopped, dismounted, sat Clemmie against a tree, and removed the sacks from the horse's hoofs. These he threw into the underbrush

Then, with his little charge, he mounted again. Once he saw horsemen approaching, so he hid Clemmie in the coat, and only nodded coldly as they passed.

The rest of the journey he talked to the child and played with her doll, to her great delight, and when he knew that he was within homing distance of Twin Oaks, he urged the spavined roan to another canter. The roan knew that the stable was almost in sight, so he went with a will.

It was dark when Harry Pinter pulled up at his shack and dismounted.

Inside, the trembling woman was awaiting his coming with queer misgivings.

She was certain that he had put his neck in the halter. She expected to see him brought home bleeding from a bullet wound as the result of his folly; but when he carried in their daughter and placed her in the wasted mother's weary lap, such a cry of joy and gratification went up from Jane's lips that the man could only stand there and let the tears roll down his face.

Mrs. Pinter marveled, too, that she could be the mother of that beautiful baby. She marveled that those little hands resting on her pallid cheeks, that the dear face she was covering with kisses, could really be her own flesh and blood!

For many moments she cried and crooned over the child. Then her suffering grew apace. The pains that had come to her with such regular recurrence ever since Clemmie was born, now came to her with more force than ever before.

She was obliged to hand the little one to Harry and return to bed—but she dared not let her husband know how terribly she suffered; she did not want him to be unhappy.

That night Clemmie took her supper from the old broken cup. Her costly dress had been put away in her father's valise, and a makeshift gown adorned her all-important little body.

Pinter watched the slumber come into her eyes as he walked the floor with her and sang a little lullaby until she was fast asleep.

Then he laid her tenderly on her old resting-place at the foot of the bed, on the very spot where she had rested two years before. To-night there was no white-capped maid listening for her slightest call. There was no blue silk coverlet, no thermometer to indicate the correct temperature of the room, no bed fit for a king.

Clemmie's abiding-place was a humble shack in a frontier town. She was sleeping in a room that would have made Ted Maller creep with anguish had he known it—and all the night Harry Pinter dozed on the floor with his head against the bed, dreaming of the posse he had so cleverly eluded!

The mother was too weak to care for the child, so Harry was obliged to be at home as much as possible.

He told no one of the new arrival at his home, and as Mrs. Pinter never had a caller, he knew that the baby's whereabouts would remain a secret.

Naturally, the rumors of the kidnaping spread as quickly as the wind, but Pinter said nothing. To others he took no interest in the case

He was happy only in the fact that he had the mascot who had brought Ted Maller so much luck, and every time he was with Clemmie he prayed that she would bring such luck to him.

Every day he heard new reports of the effort of Ted Maller to find the child.

Harry knew that the search for Clemmie would be unrelenting and might lead to his very door.

Therefore, he would not permit Clemmie to be taken out of the room in which her mother lived.

As soon as he could, he would make the proper legal claim on the child—but where and when he knew not, and he was afraid to ask counsel.

Then he decided to write to Maller, for news of fleeting posses and rich rewards and bloodhounds were coming thick and fast.

Every few days some miner or cattleman would ride over from Gold Valley with a new rumor, and Pinter believed that if he would notify Maller by mail that the child was in the possession of its parents, he might be less vigorous in his search.

So he indited the now famous letter which Ted Maller received just as he was about to put the bloodhounds on the trail.

The handwriting was disguised, and the paper and envelope had been in his possession ever since he came from the East, and could not be traced in either Gold Valley or Twin Oaks.

Having written the letter, he took it to Gold Valley himself and slipped it into the post-office so that it would bear no postmark but that of Gold Valley.

CHAPTER X.

The Scent of the Hounds.

THE dogs, having reached the Clementine Mine, stopped as if the trail went up in the air.

Then they suddenly returned to the dry-goods store and circled about its door for a while.

Finally, one more active than the rest gave out a loud cry and started down the side street.

The others followed. They swept into the lower road and were soon out on the county highway leading to Twin Oaks.

About half-way, they darted into the underbrush and tugged at some gunny-sacks.

The horsemen, led by Ted Maller, came up in hot pursuit.

The dogs were sniffing the sacks and trying to pick up the scent!

Poor bonehead Pinter! He had relied so much on those sacks He had figured it all out so wonderfully.

Ted Maller picked up the sacks and examined them. They gave no clue.

The hounds had the trail again. They started off at a bound. They were putting distance between them and the horsemen!

Ted knew that they were on the right trail.

The long hunt was about to end.

His horse was dripping blood from the gashes made by the cruel spurs, but a thousand horses would go down if it were to find his Clemmie!

Harry Pinter was at home when he heard the first distant cry.

The hauling had been slack, and, as always, he had gone to Jane's side, a faithful father and husband.

He was making some tea for the sick woman and warming a bowl of milk and egg for Clemmie, who, just at that moment, was playing on the bed with her mother.

At the first distant sound of that awful cry a choking lump came into his throat, and a spoon dropped from his trembling fingers.

He listened—and all that he could hear for a few moments was his own heart beating.

Then it came again. Then it came *again!* Egad! but they must be bounding! They must be making time!

He ran into Jane's room, locked the door, and closed the blinds.

His face was fraught with fright. His nerves were atingle with fear.

"They're coming, Jane. They're coming! I hear them! Listen! Darling! Listen! It's the hounds! Oh, my darling, my baby! I won't let them have you! I won't let them have you!"

He threw himself on the bed in a great paroxysm of fear, his face flushed, his eyes glaring.

He took both mother and child in his strong arms and held them as if they were about to be devoured by a deluge. Jane's feeble arms entwined his neck—and Clemmie, thinking that it was all in fun, put up her little face to be kissed.

"I won't let them have you! I won't! I *won't!*"

He uttered the words in a wild delirium, tears and torture, but his cries were drowned by the hounds barking and scratching at his very door.

(To be continued.)

By the Light of the Lantern

Ask us what you want to know

WE want to be as useful as possible to our readers; but, because of the great popularity of this department, we are forced to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions WILL NOT be answered in this department. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials. The editor begs that readers sending in questions will not be disappointed if the answers do not appear as early as expected. Delays are often unavoidable for two reasons: the magazine is printed two months in advance of the date of issue, and it frequently takes weeks to secure the correct answers to some of the questions.

WHICH road has the more powerful passenger-locomotive, the Chicago, Milwaukee and St. Paul, or the Chicago and Northwestern Railway?—F. B. R., Milwaukee, Wisconsin

You do not name a class of passenger-engine, but presuming that the largest is meant, without reference in particular to the Atlantic, Pacific, or the Ten-Wheel type, our records show that the former road has a Pacific (4-6-2), class F-4, which has 36,500 pounds tractive-effort; total weight, 248,800 pounds, and weight on drivers, 160,100 pounds. The nearest to this on the Northwestern, of the same type, is No. 1500, which engine exerts a tractive-effort of 31,900 pounds, with a total weight of 245 000 pounds, 151,000 pounds being on drivers. Hence the larger passenger-locomotive belongs to the Chicago, Milwaukee and St. Paul Railway

WHEN will the Pennsylvania Railroad electrify its line from Manhattan Transfer to Philadelphia?—W. W. B., Brooklyn, New York.

There is an impression among quite a few enthusiasts that the electrification which you mention has been planned and that it will be merely a matter of a few months before it is realized, but familiarity with the subject would show this view to be entirely erroneous. It is possible that the time may come when the road mentioned will be electrified, even between New York and Washington, but this is too remote to be considered now in the face of more serious problems of the moment. Before the project can be even accorded a preliminary survey, it would be necessary to analyze with the utmost minuteness the performance, cost of operation, etc., of that portion of the Pennsylvania already electrified, and it is not believed that this has been in operation sufficiently long to furnish dependable data

H. D., Browns Station, New York.—The proper interpretation of the sixteen-hour law as applied to train-crews is that sixteen is the number of hours they can work, and no more The train-despatchers are supposed to get the trains over the division within that time, and failing to do so, they must hold the train until the crew has had eight hours rest. In this connection we recall an instance on a prominent Eastern railroad where the sixteen hours expired with the train but one mile from its destination. Another crew was sent out to bring it in, the superintendent having no authority to evade the law, even if it could be presumed that he would attempt to do so

J. M., Jr., Philadelphia.—Write to the secretary of the Interstate Commerce Commission, Washington, D. C., for a full list of the bulletins and printed matter issued by the commission These are quite varied in scope, and you will, no doubt, find several of value to you as a clerk in the passenger department, especially if you are desirous of becoming generally informed on the statistics and the legislation affecting railroads. This matter is distributed without cost, and is usually furnished promptly on request. The various State railroad commissions, as a rule, limit their issue of printed matter to their annual reports, which are a voluminous résumé of the

work of the body for the year. These also may be obtained on application to the secretary.

B. H. T., Bismarck, North Dakota.—We have no reliable data concerning the strike to which you refer. It was well exploited in the daily papers, and it was thought advisable to keep this department entirely clear for matters of an instructive or generally informative nature.

J. C. M., Independence, Missouri.—The line promotion to the position of engineer in railroad service is invariably from that of a fireman. In the latter capacity they are hired into the service. This is one of the differences between procedure in this country and that prevailing abroad. In England, for instance, boys are employed as engine-cleaners, passing thence to brick-arch men, or fire-cleaners, and then to firemen.

A fair estimate of wages paid engineers and firemen here is $3.85 for the former, and approximately $2.40 for the latter. Brakemen receive about the same pay as firemen, while that of conductors is somewhat inferior to the compensation given engineers. Of course, these are only broad general figures, and are not applicable to any particular section of the country.

Pay, as we have often pointed out in this department, is largely dependent upon the existing agreements between the various labor organizations and the employing companies, but if the quotations given above are viewed as representative of the minimum wage, they will not be much in error. Twenty-one years is now generally considered the minimum age for firemen and brakemen to enter the service, but the maximum age is extremely variable. Some roads will not employ men over twenty-five years, while others extend the limit to thirty-five years.

On some roads firemen are employed by the master mechanic; on others by the road foreman of engines. It is believed, however, that in seventy-five per cent of the instances the latter is viewed as the proper employing official. It might be added that this is a very proper arrangement, as the road foreman of engines is constantly in touch with these men, and is in a sense responsible for them after they go to work. He comes in much closer contact with them than the master mechanic, whose time is fully occupied in the consideration of problems relating to organization and the maintenance of cars and locomotives.

Train-crews are required to make their homes at division-points, unless, of course, in the instance of some regular double-crewed run, in which latter contingency all that is required is that they be on time to take out the train.

On many of the railroads what are known as passenger-trainmen are employed directly as such, and without previous freight experience. Then they pass successively to collectors, baggage-masters, possibly, and then to passenger-conductors. The man entering the service as a freight-brakeman becomes a flagman and then a freight-conductor. From that he may become a passenger-conductor, should he care to "bid" on whatever of the latter may be posted as vacant. In many of the working agreements of the brotherhoods of trainmen will be found the provision that a passenger-brakeman (trainman) cannot be promoted to a conductorship until he has served a given time as a freight-brakeman, usually two years.

It is reasonable to believe that freight-brakemen understand practical railroading better than passenger-trainmen; and as it is found that freight-brakemen and conductors are in the majority, their influence is reflected in the working agreements now in force from the Atlantic to the Pacific.

WHAT is the mileage of railroads in Panama, who controls them, and what size engines are being used?—R., New York City.

The one line there is known as the Panama Railroad. Its total mileage is distributed as follows: main-line, Colon (Atlantic) to Panama, 47.27 miles; Bilboa branch, 49.73 miles; second main-line, 49.73 miles; Atlantic terminal, 30.18 miles; Pacific terminal, 13.15 miles; relocated line, 51.44 miles; sidings, etc., 14.52 miles. Total mileage, 191.66 miles.

This line was chartered by the Legislature of New York, on April 7, 1849, and was opened throughout, January 28, 1855. The immediate purpose was to provide a short route to California, but the line has since become a great commercial highway between the nations on the coast of western Europe and eastern Asia. The company is controlled by the United States of America through virtue of the ownership of the whole of the capital stock, acquired since May, 1904.

The rolling-stock consists of 65 locomotives; 53 passenger-cars of various classes; 1,382 freight-cars, and 296 miscellaneous cars. We cannot say at this writing just what size cylinders and types of engines are being used, but they have for many years been thoroughly up to date, and the natural presumption would be that so long as it has now become a government institution no retrogression in efficiency would appear as logical.

WHAT are the duties of a traveling engineer? (2) Which was the first railroad to adopt the block system?—J. O. H., Long Beach, California.

(1) They are supposed to supervise the duties of the engineers and firemen, *while on the road*. When at the shops or roundhouse they are considered to be under the master mechanics. On some roads the traveling engineer, or road foreman of engines, reports to the master mechanic, while on others he reports to the division super-

intendent. No definite or general opinion seems to exist on which would be the best organization along this line.

The editor of this department believes that so long as the two offices are so closely associated, in almost every instance under the same roof, and have so many things of common importance, that the master mechanic should be in authority There is occasionally friction created by the traveling engineer practically ignoring the master mechanic in favor of the superintendent, but as the large majority are capable and conscientious men, this latter unpleasant feature is fortunately not particularly prominent.

The traveling engineer is supposed to spend much of his time on the road in the practical instruction of both firemen and engineers, in the economical handling of coal and supplies, and in observing and reporting on the performances of any engines whose performance may not be satisfactory. He frequently is charged with the hiring of firemen and with conducting their examination when ready for promotion as engineers.

He also adjusts minor breaches of discipline, making recommendations to either the superintendent or master mechanic, and sees that no infringement is made on the agreements existing between the men and the company regarding seniority rights.

These may be briefly assigned as the routine duties of the position, but its chief value lies in the exceptional opportunity it affords a good and well-informed man to take the initiative in the solution of the tremendous problems which daily confront in locomotive operation. When properly understood and taken advantage of by the incumbent, the office is of very great importance to the motive-power department.

(2) The block system was first used in America in 1863 or 1864, and the interlocking about 1870. Both had been previously well developed on the busy railroads of England, so that American railroad officers could find there all necessary examples of its best installation and practise; but, with our lighter traffic, progress was rather slow

For many years the Pennsylvania, which in 1872 leased the lines east of Philadelphia, on which the block system had been first introduced, was the only road using it. A few roads in New England began using the wire-circuit automatic block signals in about 1871, but the time-interval rules were maintained in full force, so that the signals were of little use in increasing the capacity of railroads.

In 1879 the track circuit was introduced, making automatic block signals effective as against the danger of false "clear" signals being given by the accidental separation of a train into two parts, and incidentally affording a means for detecting broken rails. From that time the use of the automatic system has progressed as fast as railroads have found themselves able to make the heavy investment necessary to install it. Automatic block signals are now in use on upward of 12,000 miles of American railroads.

WHAT is the simplest and quickest way to set eccentrics on a Stephenson link-valve motion, and also what is the relative position of each eccentric in relation to the crank-pin?—M. B. L., Philadelphia.

Your question is not entirely clear as to whether you mean an eccentric that slipped on the road, necessitating emergency repairs to get the engine in, or whether a description of the entire process is required, as would be in evidence in the case of a new engine, or one undergoing general repairs in the back shop. In view of the former assumption it may be said that this is an accident that is not apt to occur with the modern construction of locomotives, where the eccentrics are almost invariably keyed in position, and furthermore, additionally secured by two and even four set-screws. It was, however, a common accident on engines of former days when the eccentrics were held in position merely by set-screws

In this case the engine should first be placed upon the center (forward), the wheels blocked, the reverse-lever placed in full gear ahead if the forward-motion eccentric has slipped, and full gear back if the back-motion is to be treated, and a very little steam admitted to the steam-chest. The eccentric should then be turned on the axle until steam just begins to escape from the cylinder-cock at that end of the cylinder where the piston is standing. This will afford an approximately close adjustment, at least one sufficient to proceed with the train

An old rule, for many years in vogue in the case of an indirect-motion engine, which arrangement, by the way, is still embodied in the instance of over ninety per cent of locomotives equipped with the Stephenson link-motion, called for the setting of the slipped forward-motion eccentric with its throw opposite the third spoke of the driving-wheel, *above* the main-pin, and if a slipped back-motion eccentric in a similar position *below* the pin, the latter being on the forward center

After checking over a number of modern driving-wheels we find that this would still serve in relocating the slipped eccentric in cases of strict emergency.

Setting eccentrics on new engines, or where a new axle has been applied, is necessarily a somewhat lengthy operation, in view of the fact that absolute accuracy should be secured in the first setting to secure the location of the key-ways. One plan which has given very close results may be found in answer to a query by "T. J. M.," in this department for September, 1911.

The very best procedure, although it may be objected to on account of the time required, is to merely use the set-screws to hold the eccentrics, or to change their position as may be necessary

while the valve-setting operations are in progress, and when the valve-setting has finally terminated, use a hook-scriber to locate their final position on the axle. This will guard against any possibility of error, provided, of course, that the valve-setting has been properly done.

C. T., Fruitvale, Tennessee.—Our records do not contain any reference to heavy passenger-power on the Rock Island lines other than Atlantic type, No. 1,019, which is a simple engine built by the American Locomotive Company in 1905. This locomotive has cylinders 21 inches by 26 inches; 73 inches diameter driving-wheels; 185 pounds steam-pressure, and develops a tractive-effort of 24,700 pounds. The weight of the engine on drivers is 107,100 pounds, and the total weight, 191,300 pounds.

We have no record of the heavy freight-power on this line, but from the tabulated comparisons which are prepared annually, there does not appear to be any prominent example of excessive weight or power. The editor of this department would appreciate any information as to whether the Atlantic type above referred to still remains the heaviest passenger-engine on the Rock Island lines. It is quite difficult to secure exact statistics in regard to the size or power on individual roads, as many of their purchases, well worth exploiting, are not reported to the technical papers.

WHAT system is the Chicago, Milwaukee and St Paul, and also the Northern Pacific Railroad run under?—A. A. C., Stillwater, British Columbia.

To answer this one necessitates some thought, because the word "system," as applied to railroading, suggests many interpretations. It might mean block system, accounting system, system of operation, whether departmental or divisional, or system of roads in which it is embodied. If you make it clearer, we will be pleased to advise you, but can scarcely approach your question in its present form.

AN engine having a 3-foot 6-inch stroke, and the valve having 10-inch travel with ⅛-inch lead and 2-inch lap; how far will the steam follow the piston?

(2) With an engine cutting off at ½ stroke, what is the pressure at ¾ stroke?

(3) Assuming boiler-stays at 7½-inch x 8-inch pitch, and supposing one broke; what would be the extra stress thrown on the other stays, at 170 pounds pressure on the boiler?—J. H. M., New York City.

(1) Up to the point of cut-off the valve must travel in one direction 2⅞ inches and back 3 inches. When the valve has traveled 5⅞ inches from a total of 10 inches, the piston has traveled a proportionate part of its stroke, which may be readily computed to be 24.67 inches through which the steam will follow the piston. When the total stroke, which is given at 42 inches, is contrasted with this answer the latter may appear to be incorrect, but it should be borne in mind that the valve has the very large amount of 2 inches outside lap, which thoroughly accounts for the apparent discrepancy.

(2) With a cylinder of say 1,000 cubic inches capacity, with steam at 100 pounds pressure, and carried to the point of cut-off without drop in pressure, there remains 500 cubic inches of cylinder capacity at 100 pounds. Since pressure multiplied by volume is constant, pressure at ¾ stroke would then be 500 x 1,000 and divided by 750, or 66 66 pounds.

(3) Before breaking, the stay carried 10,200 pounds, as you have proportioned the situation, but as the spacing is not uniform the 8 surrounding bolts will not be equally imposed on by the additional pressure after the fracture occurs. Each bolt must necessarily take its share in inverse proportion from the broken bolt. The two nearest bolts will take between them practically one-half of the added strain, or 2,540 pounds each; the two which are 8-inch pitch from the broken bolt, 2,340 pounds each, and the other four bolts, which are nearly 11 inches distant, 1,330 pounds per bolt.

WHAT is the horse-power of No 3000 of the Santa Fe, and what tractive-effort does it develop at 30 miles per hour?

(2) What is the difference between the 3000 and 3001 in tractive-power and weight?

(3) What were the numbers and builders of No. 3000 before it was made into one engine?—D. D. D., Monroe, Michigan.

(1) It is practically impossible to answer this question with any degree of accuracy on account of the ever-changing conditions which are present with any variation in the speed of these engines. The initial or starting tractive-effort is 111,600 pounds, but as this type of engine was probably not designed to run faster than 15 miles per hour, it would be quite difficult to even estimate it at the speed which you suggest. The power required to move the locomotive itself, of this construction, increases tremendously with the speed, and the tractive-effort must decrease proportionately. The same explanation applies to horse-power, which in this case might be calculated at 4,000 when at a speed of 5 miles per hour; the use of an indicator would be required to compute it at the higher speeds.

(2) There is no difference between the numbers you mention. Ten locomotives are included in the scheme of conversion into the 2-10-10-2 type by the addition of front-units.

(3) The original locomotives were built in 1902 by the Baldwin Locomotive Works, and are designated in the railway company's classification as the 900 and 1600 classes. The front section which was applied was also built by the same firm to the company's specifications.

For conversion ten locomotives were selected which required new fire-boxes and general repairs. These were forwarded to the shops at Topeka, where they were thoroughly overhauled and the necessary changes made for the application of the front sections. While making repairs, the original low-pressure cylinders were bushed from 32 inches to 28 inches in diameter to constitute the high-pressure cylinders of the Mallet locomotive

The front section is mounted on a two-wheel leading-truck and ten driving-wheels. The truck is of the same design as that under the original locomotive, and the driving-wheel centers are arranged at the same distance as on the original.

In reference to your question regarding the relative sizes of the American Locomotive Company and the Baldwin Works, it may be said that the way things have been in the locomotive building business during the past few years there has been no opportunity to test the capacities of either concern. It is believed, however, that working under high pressure there would be little difference in the output of either

The American Locomotive Company has works at Manchester, New Hampshire; Providence, Rhode Island (for automobiles); Paterson, New Jersey (two works, Cookes and Rogers); Schenectady, New York; Dunkirk, New York; Pittsburgh, Pennsylvania; Richmond, Virginia, and Montreal, Canada. A branch of the Baldwin Locomotive Works may be found in an extensive new plant located at Eddystone, a suburb of Chester, Pennsylvania

The other locomotive-building firms which you mention do not compare in extent and output with the above, but they all appear to be quite prosperous, and are doing a good business in the construction of locomotives of smaller sizes and special designs.

J. E. W., Coalinga, California.—We can recommend to you *Power*, published by the John A. Hill Company, Pearl Street, New York City, as an excellent medium for those interested in stationary engineering and kindred problems.

J. B. D., Como, Mississippi.—Your interesting questions in regard to the general arrangement of block and automatic signals will be fully answered in a forthcoming issue of the magazine in a special article which is now in preparation It would be impossible within the rather restricted space of this department to convey the information which you desire in a form which would render justice to such an important subject

L. B., Monroe, Michigan.—(1) In regard to your question concerning the Baldwin Locomotive Works and the American Locomotive Company, see reply to "D. D D." in this issue

(2) The builder's name-plate is a cast iron or brass plate commonly fastened to each side of the smoke-box, giving the name of the builder of the locomotive. It generally also includes the date when the engine was completed, and the last number indicates the total output.

(3) As nearly as can be computed from the dimensions of the "John Bull," the tractive-effort could scarcely have been more than 2,000 pounds. We are now endeavoring to secure full data on this engine in order to check this estimate.

(4) Address *Railway and Locomotive Engineering*, New York City. This firm publishes a very complete work by Dr Angus Sinclair on the history and development of the locomotive It will no doubt give you all of the information that you desire

WHAT is the difference between an ordinary compound locomotive and a Mallet articulated compound?—H. S., Jackson, Georgia

All compound locomotives may be briefly described as those having one or more cylinders so arranged that the exhaust steam passes from one cylinder into another cylinder or cylinders, where it performs additional work before being discharged from the exhaust-nozzle and stack.

The Mallet is a member of this general type, using steam in precisely the same manner, but differing in wheel-arrangement and in details of construction. In it the driving-wheels are divided into two groups, of three, four, or even five pairs each.

The rear group is carried by the main-frame of the engine, and is driven by the two high-pressure cylinders. The forward group is carried by the supplementary-frame, and is driven by the pair of low-pressure cylinders, the frame and wheels of the low-pressure engine constituting a swiveling-truck supporting the front end of the boiler The object is to attain a locomotive of great weight and power, but having a short rigid wheel-base to permit its rounding sharp curves.

In regard to the location of certain engines on divisions, you will have to obtain this information through direct correspondence with the superintendent of motive-power of each road named. For the Santa Fe, address W F. Buck, Chicago, and for the New York Central lines, J. F. Deems, Grand Central Station, New York City.

J. K., Cleveland, Ohio.—As roads are ordinarily constituted, the general passenger-agent is the official to whom agents report; that is, so far as accounting is concerned. In cases where agents are operators they report to the superintendent of the division

Conditions vary so much that it would be very hard to outline the procedure required to become a station-agent. The size of the station has a great deal to do with the matter. Quite frequently a man gets on as assistant, and after proving

himself capable, is advanced when vacancy occurs. While it is not essential in the larger stations that the incumbent should be an operator, the latter is a qualification which would impel much more serious consideration of his application, as they generally start at some out-of-the-way place where they have to take charge of the wire.

W. L. R., Lewiston, Montana.—George W. Robb is master mechanic on the Grand Trunk Pacific Railway, at Rivers, Manitoba. This road has some 2,800 additional miles under construction. Grant Hall is superintendent of motive-power of the Canadian Pacific Railway (west lines), at Winnipeg, Manitoba.

IN regard to the Walschaert valve-gear I have not heard an explanation of how to find the length of the eccentric-arm attached to the crank-pin. I measured an engine recently with 6-inch valve-travel, and the eccentric-arm was 14½ inches.—J. M., Spokane, Washington.

There is no real rule for this, as in the case of every new design of locomotive the entire valve-motion must be laid out on the drawing-board. The idea is to so proportion the arrangement of the parts that the angularity of the eccentric-rod will be reduced to a minimum, and to this end it becomes necessary to possibly lengthen the link-arm, increase that of the eccentric-arm, etc., all depending on the general arrangement of the engine. Experience shows that a valve with 5¾ inches travel is generally accompanied with an eccentric-arm of 12 inches length, but this is not by any means an infallible proposition.

J. E. N., Springfield, Illinois.—The horse-power of a locomotive is such an uncertain quality, as we have often endeavored to point out, that it is practically impossible to refer to it as a definition of power. Engine No. 623 of the Chicago and Alton (4-6-2 type) carries 200 pounds steam-pressure and exerts a tractive-effort of 31,475 pounds, placing it well in the front of engines of this class.

B. N. G., Cadmus, Michigan.—It might be possible that the flues in your boiler have been "rolled to death"; that is, they have been rolled so often that the metal has been reduced to a point where it is no longer possible to keep them tight. Unless they are beaded after being rolled, each rolling will have a tendency to stand the bead away from the sheet, giving the fire a chance to get in very destructive work. The use of copper ferrules is to be very highly recommended, and if you renew the flues they should be used.

HOW is the position of Pullman conductor secured, and what is the pay?

(2) Can the position of passenger-brakeman be obtained before serving as freight-brakeman on any Eastern road?—H. H. K., Geneva, Indiana.

(1) Application should be made on a regular form, which can be secured from any superintendent of the Pullman Company. Two or three references are required, and if influential, it would be advisable to attach recommendations to the application. It is hard to say how long a time will elapse before any action is taken. A Pullman conductor on entering the service is paid at the rate of $70 per month; after 6 months, $75; after one year, $80; after 5 years, $85, and after 10 years' service, $90 per month and uniforms free. There are a few who run on limited trains who receive $95 per month, but that is the limit.

(2) See reply to "J. C. M." in this issue.

DEVICE TO PREVENT DERAILMENTS.

J. L. BERING, of Fort Worth, Texas, who has been a Santa Fe conductor for quite a number of years, has invented a safety appliance designed to automatically apply the air-brakes to a train in which a wheel has left the track, and to carry the car in a manner that prevents complete derailment.

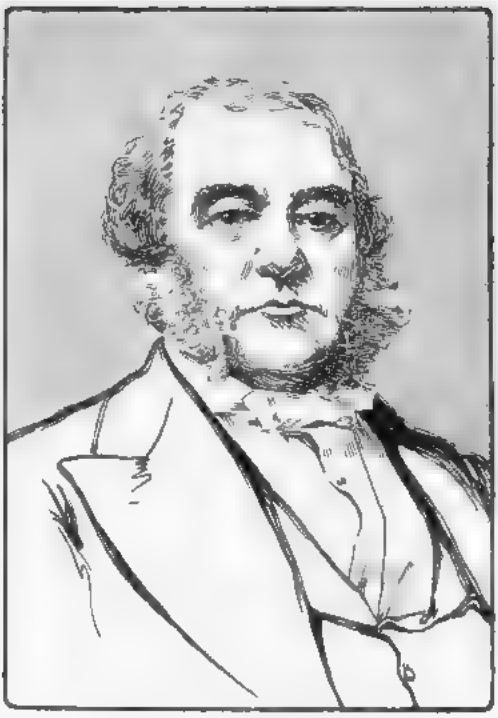
The device consists of a set of four rollers attached to each car-truck. These rollers are carried in pairs on each side of the truck and are stoutly fastened to it.

Each pair of rollers lies between the wheels, just above the track, and when a wheel leaves the track the rollers drop to the rail, preventing the wheels from running on the ties and also keeping the car in position on the track, as the rollers are eighteen inches wide, with a flange on each side.

These rollers are corrugated, so as to grip the track and compel them to revolve. As they revolve, a crank is turned on the inner side of the roller, and the handle of the roller strikes the handle of a valve in the train line, causing an emergency application of the brakes.

Under tests the device has proved its efficiency in derailments caused by spread or broken rails, broken flanges, failures of trucks, and loose wheels.

The rollers are made of cast steel, three and one-half inches in diameter, and are capable of safely carrying three hundred and eighty-seven thousand pounds. It is claimed by Mr. Bering that the cost of attaching them will be less than fifty dollars a year. The weight of the entire equipment is about one thousand pounds.—*Santa Fe Employes's Magazine.*



J. EDGAR THOMSON,

ENGINEER WHO LOCATED THE ROUTE OF THE PENNSYLVANIA RAILROAD.

Redrawn by F. A. Todhunter from an engraving by Continental Bank Note Co.

BIRTH OF THE PENNSY.

A Gigantic System Which Grew Out of a Canal—Track with Wooden Rails and an Imported Locomotive that Refused To Go.

BY JOHN WALTERS.

This is the first of a series of articles on the beginning of the great railway systems of America. It is not our intention in these papers to give anything like a history of the road under consideration, but merely to describe the beginning the birth—of the big lines of this continent. Read this and contrast the early wooden railway from which the "Pennsy" grew with the massive system of to-day, which operates 11,235 miles of track, 6,087 locomotives, and 250,214 pieces of rolling stock.—THE EDITOR.

ONE of the first railroad projects inaugurated in America was in Pennsylvania, and although it was not at that time consummated, its agitation helped to prepare the public mind for the reception of the new means of transportation and travel and paved the way for ultimate success.

The Legislature of that State, on March 31, 1823, passed an act incorporating a company to construct a railroad from Philadelphia to Columbia, on the Susquehanna River, in Lancaster County, a distance of about eighty miles.

This act stated that, whereas John Stevens had memorialized the Legislature for authority to build such a road, and announced that he had made many discoveries and improvements in the manner of constructing railroads, therefore the privilege was granted to him.

Among the incorporators named in the act were Horace Binney and Stephen Girard, of Philadelphia. Colonel John Stevens was, however, to be the master spirit of the enterprise.

Colonel Stevens was a citizen of Hoboken, New Jersey. In 1811 he presented a memorial to the Legislature to authorize a railroad in New Jersey, and in 1815 a

law was passed incorporating The New Jersey Railroad Company, authorizing a road from Trenton to New Brunswick, but it was not built

In 1820 Colonel Stevens built a short road near Hoboken as an experiment. The road was built under his supervision and according to his plans.

All transportation over it was to be under his superintendence or that of his legal representatives, and he was authorized to charge tolls on all freight carried at a rate not to exceed seven cents per ton per mile on that passing westward, and three and a half cents per mile per ton on all moved eastward.

The road was "not to rise above an angle of ten degrees with the plane of the horizon," was to "cross all roads by means of causeways," and the capital stock was fixed at six thousand shares at one hundred dollars each.

The charter was to continue in force for ten years, and to be forfeited if the road, after construction, was permitted to become impassable for two years.

It does not appear that any serious effort was made to build the road under the authority thus obtained, and it is altogether probable that the scheme was John Stevens's own, and that he, like John Fitch, was in advance of the age in which he lived

At that time the people had very little faith in the practicability of steam-railroads

Water communication, by means of canals, was still the favorite theory of all who desired anything better than turnpikes, and, in 1824, the Legislature of Pennsylvania authorizing the appointment of three commissioners to explore a route from Philadelphia to Pittsburgh for such an improvement.

Some Kind of Road Needed.

This exploration was made, and the report appears to have been favorable to the construction of a combined slack-water and canal line, connected, of course, over the Alleghany Mountains by a road of some kind.

So well convinced was the Legislature of the practicability and utility of such a channel of communication, that on April 11, 1825, a law was enacted establishing a regular board of canal commissioners.

In 1826 Pennsylvania fairly embarked in the work of constructing her public improvements.

An act was passed that year providing for the commencement of a canal, to be styled "The Pennsylvania Canal," to be constructed at the expense of the State.

It was to be built from the Swatara River, at or near Middletown, where the Union Canal commenced, to the mouth of the Juniata River, and from Pittsburgh to the mouth of the Kiskiminitas River, on the Alleghany River.

On the Fourth of July of that year ground was broken for the work near Harrisburg. The design appears to have been to make both the Juniata and Kiskiminitas Rivers navigable by slack-water, and then to use the Union Canal as the eastern end of the line, connecting it with Philadelphia.

The sum of $300,000 was appropriated to enable the canal commissioners to commence the work.

The same year, an act to incorporate the Columbia, Lancaster and Philadelphia Railroad Company was passed, with a capital of $650,000.

Proved a Dead-Letter.

This act covered the same ground, and repealed the John Stevens charter of 1823. Like its forerunner, it proved a dead-letter, but it showed that the idea of a railroad to connect the Susquehanna and the Delaware Rivers still lived.

During the same session of the Legislature, five railroad companies were incorporated, but none of them were of any particular importance.

Pennsylvania having thus inaugurated a system of public improvements, persevered in their construction and enlargement with commendable energy.

Satisfied that private enterprise, at that time, was unequal to the task of building a railroad between Philadelphia and Columbia, and knowing that anything like direct water communication to connect those points was impracticable, the Legislature, in 1827, authorized the canal commissioners to make examinations for such a road through the counties of Chester and Lancaster to connect with the canal.

They also were to extend their examinations, for the same purpose, from Wrightsville, in York County, and from Harris-

burg, through the Cumberland valley to Chambersburg.

The following year, 1828, these commissioners were directed to locate and put under contract a railroad from Philadelphia, via Lancaster, to Columbia, and complete the same within two years, if practicable.

Over the Alleghanies.

By the same act they were required also to examine a route for a railroad from Huntingdon to Johnstown, over the Alleghany Mountains.

The sum of $2,000,000 was appropriated for this purpose, and to continue the work on the canals already begun.

This was the actual commencement of the Columbia and the Portage railroads, which, at that early date, were of great magnitude.

For peculiarities of construction rendered necessary by the great barrier to be overcome, the Portage was never surpassed in the world.

The main line of the canal, extending from Columbia to Hollidaysburg, at the eastern base of the Alleghany Mountains, and from Pittsburgh to Johnstown at the western base, was being pushed to completion as rapidly as possible at the same time.

The State was stimulated in this work by the fact that New York, in 1826, had completed the Erie Canal, connecting the lakes with New York City, and the knowledge that that improvement alone was carrying annually nearly $70,000,000 worth of the products of the West to the seaboard.

Loan of $4,000,000 Made.

This canal had deprived Philadelphia of her commercial supremacy, while it had stimulated the growth of her rival to a remarkable degree.

Self-preservation required prompt and liberal action on the part of Pennsylvania, and the requirement was met by an annual expenditure for her public works of about two millions of dollars, running through a period of many years.

This expenditure taxed her resources to the utmost, and various means were resorted to for the purpose of raising revenue.

Among these devices may be mentioned an arrangement by which, in 1830, the charter of the Bank of Pennsylvania was extended for the period of eighteen years, on condition that it loan the State $4,000,000 at 5½ per cent, which sum was to be appropriated toward completing the canals and railroads.

While the State was thus pushing forward the main line, individuals were likewise engaged in constructing railroads within her borders.

In 1831 a number of companies were incorporated, and, in 1832, among others, the construction of the Harrisburg and Portsmouth, the Strasburg, and the Philadelphia and Trenton railroads were authorized, two of which are now controlled by the Pennsylvania Railroad Company.

During this year portions of the Columbia Railroad were completed and cars commenced running.

Road Totaled 394 Miles.

In 1833 the canal commissioners were directed by law to complete the Columbia Railroad with a double track, and the Portage with a single track, and to finish the main line of canal.

This was promptly done, and, in 1834, the entire line between Pittsburgh and Philadelphia was opened to trade and travel

The line as finished consisted of the Columbia Railroad, eighty-two miles in length, running from Philadelphia to Columbia, on the Susquehanna River; the eastern division of the canal, one hundred and seventy-two miles in length, extending from Columbia to Hollidaysburg; the Portage Railroad, from Hollidaysburg to Johnstown, a distance of thirty-six miles, and the western division of the canal, from Johnstown to Pittsburgh, one hundred and four miles in length, making an aggregate length of three hundred and ninety four miles.

Being a broken route, and requiring constant reshipment of freight, it was both difficult and expensive to operate, and did not pay. However, it was a great benefit to the country through which it passed.

The Columbia Railroad being one of the first built in the United States, contained most of the defects of our primitive roads

It was very crooked, some of the curves being on a radius of 631 feet. Its gradients, owing to the comparatively level coun-

try over which it was built, and the care of the engineers who located it, were not heavy, in no place exceeding forty-five feet per mile, and that for a very short distance, while the uniform grade was kept at thirty feet.

Queerly Constructed Track.

An inclined plane was at each terminus. The one at Philadelphia was 2,805 feet in length, with a rise of 187 feet.

The track was of varied construction, consisting in part of granite or wooden sills on which were secured flat rails There were also "edge" rails on stone blocks and stone sills, also "edge" rails on stone blocks and locust sills.

These gradually gave place to modern improvements, and many of the sharper curves were straightened.

The road having been constructed to be operated by horse-power, the track and turnouts were adapted for that purpose.

For several years these horse-cars were regularly run between Columbia and Philadelphia. They were built something like the old stage-coach, but larger, the entrance-door being at the side and the driver occupying an elevated seat in front.

The time of these cars over the road—a distance of eighty-two miles—was about nine hours, the horses being changed every twelve miles

The first locomotive put on the road was built in England. It was named Black Hawk, for the celebrated Indian chief.

As the eastern end of the road was not then completed, this engine was hauled over the turnpike to Lancaster, as she was to be used between that city and Columbia.

The day for her trial trip was a perfect one. Thousands of people gathered from the surrounding country to witness the novel performance. Governor Wolf and the State officials were all in Lancaster to participate, and the excitement ran high.

She Wouldn't Budge.

Men were stationed along the track to keep the too venturesome boys out of danger, and among these guardians was an Irishman who made himself particularly officious. Armed with a club he paraded along the road, shouting to the urchins:

"Get out of the track! When she starts she'll go like a bird, and ye'll all be kilt."

The important moment came. The engineer pulled the lever, but the locomotive would not go.

At length the train was got under way by pushing, but the wonderful Black Hawk did not "go like a bird." She proved a dismal failure, and her history is lost in oblivion.

Soon after three smaller engines were imported and put on the road. These did better than their predecessor, and, about 1836, locomotives were put to work regularly and horse-power abandoned.

From this time on the State furnished the motive power, while all cars used for the transportation of passengers and freight were the property of individuals.

A regular rate of toll was charged for the use of the road and for motive power.

The Portage road, over the Alleghany Mountains, during all the time it remained in operation, was one of the wonders of America. It consisted of eleven levels or grade lines and ten inclined planes.

The ascent from Johnstown to the summit was 1,171½ feet in 26½ miles, and the descent from the summit to Hollidaysburg was 1,399 feet in 10 miles.

The planes were numbered eastwardly—the one nearest Johnstown being No. 1, and that nearest Hollidaysburg being No. 10.

Hauled by Wire Ropes.

The cars were passed over these planes by means of wire ropes attached to stationary engines. It is a notable fact that during the twenty years the road was used no serious accident ever occurred.

Boats used on the canal for carrying through freight were built in sections, which sections were placed on trucks and carried over the railroad.

The cost of the main line to the State was, according to a report made by the auditor general in 1843, as follows:

Columbia Railroad.....	$4,204,969.96
Portage Railroad.....	1,828,461.38
Eastern division of canal.....	1,736,599 42
Juniata division of canal.....	3,521,412.21
Western division of canal....	3,069,877.38
Total	$14,361,320 35

This sum, however, was but a part of the expenditure made by the State for public improvements.

Between the years 1791 and 1828 Penn-

sylvania had appropriated for turnpike roads, bridges, and inland navigation, $22,010,554, and then only on the threshold of her transit works.

Canals were located along nearly every important stream, and roads and bridges were multiplied almost indefinitely.

Not one of these improvements proved remunerative to the commonwealth, however beneficial they may have been to her citizens.

In 1835 the act incorporating the Cumberland Valley Railroad—now a part of the Pennsylvania Railroad system—was revived and extended for ten years. Under this extension the road was built, the State taking a portion of the stock to aid in its completion.

Too Slow and Costly.

The main line was now in successful operation, and the long-sought desideratum of connecting the waters of the Ohio River with those of the Delaware River was accomplished, yet it soon became evident that this "gigantic project of the century," as one writer then put it, was not calculated to meet all the requirements of trade.

It was too slow, too expensive to operate, and too complicated. Public attention was very soon directed to the necessity of building a through line of railroad.

The first companies incorporated for this purpose were the Sunbury and Erie and the Pittsburgh and Susquehanna, charters for which were authorized by act of April 3, 1837.

The first-named was empowered to build a railroad from Sunbury, via Northumberland, to Erie, and the second from Pittsburgh along the Alleghany River to connect with the Sunbury and Erie.

Six thousand shares of the stock of the Sunbury and Erie were at once subscribed for, principally by the Pennsylvania Bank of the United States; but the undertaking, despite the favorable auspices under which it started, languished, and it was many years before it was finally consummated.

Pittsburgh to Harrisburg.

The following year a convention to urge the construction of a continuous railroad at Pittsburgh assembled at Harrisburg on March 6.

Delegates were present from twenty-nine counties, and also from Cleveland, Ohio.

Robert T. Conrad, of Philadelphia, presided, and the subject was thoroughly and ably discussed. Addresses were prepared, memorials to the Legislature drawn, and everything that zeal and ability could suggest was done to stimulate the State and the people to commence the great work.

Some effect was undoubtedly produced by these efforts, because in the same year Hother Hage, an engineer of distinction, under authority from the State, surveyed a route for a continuous railroad through the counties of Franklin, Bedford, Somerset, Westmoreland, and Allegheny, and during the following year Charles L. Schlatter was appointed by the canal commissioners to survey similar lines from Harrisburg to Pittsburgh.

Mr. Schlatter made a report in 1840, in which he specifies three routes which had been examined and surveyed through. The first of these was Mr. Hage's route. It was called the southern, and was pronounced practicable with the exception of about fifty miles over the mountains of Bedford and Franklin counties, where it was suggested the turnpike be improved and used.

The second was styled the northern route, and followed the Susquehanna to Northumberland; thence up the west branch and by the Bald Eagle Creek to the head of the western waters. This was also considered a feasible route, but too circuitous.

The third was called the middle route, and was by way of the Juniata and the Conemaugh Rivers. It was deemed in all respects the best, and is the one on which, at a subsequent period, the great Pennsylvania Railroad was built.

Planes Not Necessary.

The survey of this route by Mr. Schlatter first conclusively demonstrated that it was possible to cross the Alleghany Mountains without the use of inclined planes, and it was not long afterward that a new road to accomplish this was commenced by the State.

Mr. Thomson, chief engineer of the Pennsylvania Railroad, under whose immediate supervision and direction the route of that road was located, was convinced at an early period of the advantages of the middle, or Juniata, route, and in his first annual report says:

> This stream has its source in the Alleghanies, and consequently, as it flows toward the Atlantic, severs all the secondary moun-

tain ranges that lie east of the Alleghanies, and it heads opposite to the Black Lick and Conemaugh Rivers, both of which sever those on the west, leaving the main Alleghany only to be surmounted, which would have to be encountered upon any other direct route in addition to any of the inferior mountain ranges.

The searching examinations made of the whole region offering any chance for a more practical route, on the north or south of the Juniata, leaves no doubt in my mind but that the best line has been secured for the eastern division

Its comparatively easy curvature and low gradients, adapted in their inclination to the direction of the largest business, and extending from the eastern terminus of our road to the foot of the great barrier that divides us from the west, gives it advantages that are not equaled by any other route proposed between the East and West, and cannot be too highly appreciated by the company.

Great as was the necessity for a through railroad, and thoroughly as that necessity was realized by the people of the State, years were permitted to elapse before work was actually commenced.

In 1845 a public meeting was held in the Chinese Museum, Philadelphia, to urge the improvement; but it was not until one year later that the project assumed a tangible shape.

Act to Incorporate Pennsy.

On April 13 of that year the act to incorporate the Pennsylvania Railroad Company was passed. The capital of the company was fixed at 7,500,000, with the privilege of increasing it to $10,000,000.

The company was authorized to build a road to connect with the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad, to run to Pittsburgh or some other place in the county of Allegheny, or to Erie, as might be deemed most expedient.

The act also provided that in case the company should have $3,000,000 subscribed and $1,000,000 actually paid into its treasury, and have fifteen miles of its road under contract for construction at each terminus prior to July 30, 1847, the law granting the right of way to the Baltimore and Ohio from Cumberland, Maryland, to Pittsburgh should be null and void.

All these conditions were complied with, and on February 25, 1847, Governor Shunk granted a charter to the company. On August 2, 1847, he issued his proclamation declaring that the privileges granted the Baltimore and Ohio were abrogated.

This action created considerable dissatisfaction in Allegheny and other southwestern counties of Pennsylvania, and it required the lapse of time to satisfy those sections that it was for their advantage, as well as for the best interests of the State of Pennsylvania.

Hard on First Promoters.

The energy with which the construction of the Pennsylvania Railroad was prosecuted, and the careful manner in which its route was located, soon changed the antagonism of western Pennsylvania to the East to friendship and sympathy.

The principle which governed the early managers of the Pennsylvania Railroad in its construction was to build it out of the cash subscribed by the stockholders.

To accomplish this they decided to make their *bona-fide* capital sufficient to cover the necessary expense of its construction and equipment, and to pay the stockholders six per cent from the time their money was contributed.

They argued that it was as easy and more just to pay this interest from its inception than to borrow money at usurious rates on bonds, the holders of which in a few years absorbed the entire property of the undertaking, and left the first promoters with nothing to pay for their enterprise and liberality.

This sort of dealing is too frequently chronicled in our railroad history.

Books Opened for Subscriptions.

Books were opened on June 22, 1846, at various places in the State for subscriptions to the stock, and the utmost zeal was displayed by the originators of the enterprise in securing the cooperation of the people.

Committees went from house to house in Philadelphia; public meetings were held; the newspapers were untiring in their effort to demonstrate the importance of the work, and, as has already been intimated, a reasonable degree of success followed.

In their first annual report the directors stated that out of 2,600 subscriptions nearly 1,800 were for five shares and under.

Many of these subscriptions were made without any hope on the part of the subscribers that their investment would ever prove profitable.

The necessity of the road was admitted, and the people were willing to aid its construction; but it was not long until a different opinion of its profit-making qualities prevailed, and this stimulated the desire to invest in its stock.

Mr. Thomson, the chief engineer, contended from its commencement that the road would certainly prove remunerative to the stockholders, and in his first annual report stated that "dividends from its revenue can be made of six, eight, or ten per cent by changing the rates of freight and passage at the discretion of the directors."

In support of these prophetic words he states in the same report that "if the road possessed no other source of revenue than the local travel and transportation of the rich and populous region to be traversed by it—secured, as it will be, from competing lines by natural barriers, stretching out on either side from the Susquehanna to the Potomac—they would be sufficient to justify its construction."

J. E. Thomson's Work.

Mr. Thomson entered upon his duties as chief engineer of the road in the early part of 1847. The directors say in their first annual report that "in the selection of a chief engineer the board was fortunate in obtaining the services of Mr. John Edgar Thomson, a gentleman of enlarged professional experience and sound judgment, who had obtained a well-earned reputation upon the Georgia road, and in whom the board place great confidence."

Mr. Thomson at once proceeded to organize his forces and to apportion the work to be performed. Such distinguished and experienced engineers as Mr. Edward Miller, Mr. William B. Foster, Jr., Mr. S. W Mifflin, Mr. G. W. Leuffer, Mr. Strickland Kneass, Mr. Edward Tilghman, Mr. Oliver Barnes, and others were employed in the location and construction of the road.

It is not surprising, therefore, that a distinguished authority has said that no similar work was ever commenced with better engineering.

Mr. Thomson himself had extended railroad experience, and his reputation was well earned. He was a native of Delaware County, Pennsylvania, and commenced his professional career in 1827 in the engineer corps employed on the original surveys of the Philadelphia and Columbia Railroad, having received his appointment from the secretary of the board of canal commissioners of Pennsylvania.

He continued in this service until 1830, when the State, failing to make the necessary appropriations for the continuance of the construction of the road, he entered the employ of the Camden and Amboy Railroad as engineer of the eastern division.

Then the Longest Road.

After leaving this service he visited Europe to examine the public works of that continent, and shortly after his return in 1832 he was appointed chief engineer of the Georgia Railroad, extending from Augusta to Atlanta, that State, with a branch to Athens, in all 213 miles of railway, at that time the longest railway under the control of one company in the United States.

Mr. Thomson continued in that service as chief engineer and general manager until his unsolicited election to the position of chief engineer of the Pennsylvania Railroad.

The grading of the first twenty miles of the Pennsylvania west of Harrisburg was let on July 16, 1847, and six days later fifteen miles east of Pittsburgh were put under contract. Work on the eastern end was pushed vigorously.

On November 26, 1847, forty miles additional were let, carrying the portion under contract of the eastern end to Lewistown; and about the same time a contract was made by the company for 15,000 tons of rails to be manufactured in Pennsylvania.

The city of Philadelphia during the same year subscribed $2,500,000 to the road, and the county of Allegheny followed the year after with a subscription of $1,000,000.

On September 1, 1849, the first division, extending from Harrisburg to Lewistown, sixty-one miles, was opened to travel, in connection with the canal and turnpike.

A year later, September 17, 1850, the line was opened to the Mountain House, one mile east of Hollidaysburg, where connection was made with the State Portage road over the Alleghany Mountains.

But 28 Miles To Build.

In August of the succeeding year twenty-one miles west from Johnstown were finished, which, with the portion built east from Pittsburgh, left a gap of but twenty-eight miles to complete the line.

This was closed up during the following year, and on December 10, 1852, the cars were run through from Philadelphia to Pittsburgh.

Connection was formed by using the Portage road over the Alleghany Mountains—the road of the company not being finished there until February 15, 1854, when it was formally opened, and the first trains passed through Pennsylvania without using the inclined planes.

On February 2, 1852, Mr. Thomson was elected president of the company, and while holding that office he saw the great work completed which he as chief engineer had commenced.

He was continued in the position without interruption up to the time of his death, devoting to the great enterprise twenty-seven years of his life and bestowing upon it an amount of care and attention seldom given by any other American to a similar work.

The Pennsylvania Railroad was constructed in a superior manner, and, with the improvements since made, is undoubtedly as perfect as a road can possibly be.

Overcoming a Great Barrier.

Notwithstanding it had to overcome the great Alleghany Mountains—a barrier which for a quarter of a century had been considered insurmountable by a railroad without inclined planes—yet it was carried across by engineering skill with a facility really astonishing.

The road commences a gradual ascent at Harrisburg, where it is 310 feet above tide, and rises regularly. At Lewistown it is 480 feet above tide; at Huntingdon it has ascended to 610 feet; at Tyrone it has climbed to an altitude of 886 feet; and at Altoona, where it reaches the base of the mountain proper, it is at an elevation of 1,168 feet. Up to this point the heaviest gradient per mile has not exceeded twenty-one feet.

From a short distance west of Altoona this gradient is increased to ninety-five feet per mile on straight lines, and eighty-two feet per mile on curves.

When the through line of railroad was finished and in operation many of the people became anxious to sell improvements which had cost them much, and had proved in an economic sense to be failures.

For a quarter of a century they had labored under heavy debt and had submitted to onerous taxation to construct and maintain canals and railroads which brought no return to the public treasury, and were frequently used as auxiliaries to political schemes.

No Purchaser Found.

They had borne the burden in the past because they were unwilling to see their State blotted out of the highways of travel and traffic; but now that individual enterprise had secured her against competition, they wanted to rid themselves of the incubus.

On April 27, 1854, the Legislature passed a law providing for the sale of the main line, but its provisions were so drawn that under it no purchaser could be found. In 1855 a similar act was passed, but it, too, proved ineffectual.

During this time the Pennsylvania Railroad Company was protesting against the injustice of a tonnage tax which was imposed upon all traffic over its road, and a majority of Pennsylvanians—particularly those who were compelled to ship their goods over the railroad—espoused the cause of the company.

The State partially yielded to this pressure by repealing the tax on coal and lumber; but, instead of allaying the demand for repeal, this concession only added to its urgency.

It was observed that these two interests were greatly stimulated by the repeal and the reduced cost of transportation that followed, and the representatives of other interests insisted upon similar justice and favor.

In the midst of this discussion the commonwealth again determined to sell her public works, and on May 16, 1857, a third law for this purpose was passed. It fixed the minimum price for the main line at $7,500,000, and provided that if the Pennsylvania Railroad Company became the purchaser it should pay $2,500,000 additional, and in consideration was to be relieved of all taxes on tonnage or freight carried over its road as well as of other taxes which were specified.

Still More Trouble.

Under this act the company became the purchaser, and on August 1, 1857, the Governor by proclamation transferred the main line to its new owner.

But the difficulty did not end here. The

supreme court of Pennsylvania pronounced so much of the act of 1857 as related to the general taxes imposed upon the railroad company unconstitutional; and the company, therefore, found itself the owner of the State improvements and still taxed by the State for their protection.

Such a position was so manifestly unjust, and, besides, was so clearly in violation of the spirit and intent of the law under which the main line had been sold, that the company declined to pay the tonnage tax to the State, but held it subject to judicial decision or amicable adjustment.

By the purchase of the main line the company was enabled greatly to improve its facilities and add to the comfort of passengers.

Colonel T. A. Scott.

In 1858 Colonel Thomas A. Scott—a gentleman whose name is perhaps as familiar to the American people as that of any other man connected with railroads—was appointed general superintendent of the road.

In its report that year the board of directors say that Colonel Scott "has been connected with the transportation department since its organization, and has acted, since the operations of that department were extended beyond the mountains, as superintendent of the western division. From the successful administration of the duties therefore confided to him, the board has entire confidence that the high reputation of the road for safety and the despatch of its business will be fully preserved."

Colonel Scott was born in Franklin County, Pennsylvania, and commenced his long and eminently successful railroad career on the main line of State improvements August 1, 1841, when he was appointed clerk to the collector of tolls at Columbia.

From there he was transferred in 1847 to the collector's office at Philadelphia as chief clerk. In 1850 he entered the service of the Pennsylvania Railroad Company as station-agent at Duncansville, then the western terminus of the road, from whence he was transferred to the western division as its superintendent.

It was there he displayed that wonderful executive ability and indomitable energy which have made him famous wherever American railroads are known.

During Colonel Scott's management of the road as general superintendent many improvements were introduced, and the transportation facilities of the company greatly increased.

Sleeping-cars were put upon the road, and connections were perfected at Pittsburgh by which the use of omnibuses and drays in the transfer of passengers and freight was avoided.

Purchasing from the State.

While these improvements were being made, and the question of tonnage tax imposed upon the road was agitating the public, William B. Foster, Jr., the vice-president of the company, died, and on March 4, 1860, Colonel Scott was elected to succeed him.

He at once took measures, under the direction of Mr. Thomson, to secure an adjustment of the difficulties existing between the commonwealth and the company, and on March 7, 1861, an act "for the commutation of the tonnage tax" was passed. By it the Pennsylvania Railroad was to pay in annual instalments the sum of $13,570,000 to the State in full for the purchase of the main line and the repeal of the tax.

The tax which had accumulated in the hands of the company during the pendency of the question of its validity and repeal, amounting in the aggregate to $850,000, was to be used in aiding the completion of eleven different railroads in the State.

The Question Settled.

Thus, after a contest extending over a period of six years, the vexed question was settled to the satisfaction of all parties interested; the railroad was relieved of an imposition which subjected it to the mercy of its competing rivals, and Pennsylvania was placed in a position which enabled her to rapidly extinguish her indebtedness and relieve her people from a burdensome taxation they had long and patiently borne.

During the same year the Harrisburg and Lancaster Railroad was leased by the Pennsylvania Railroad Company for the period of 999 years, thus giving the latter company the ownership of the entire through line between Philadelphia and Pittsburgh.

Previous to this that road had been operated under contract made in 1849 for twenty years, which by the new arrangement was annulled.

A Kettle of GOLD

by King Kelley

RETURNING up the trail to his cabin from one of his long, hard jaunts in the mountains, Mark Gardner's tired feet scuffed the ground closely. So very closely did they drag along the ground that he often stumbled. His toe caught against something finally, and he sprawled at full length.

The heavy pack helped to knock the wind out of him, and every aching bone and muscle seemed to tear.

Rising slowly to hands and knees, he turned to the offending obstacle. His eyes bulged, and the rush of blood to his head made him dizzy as he looked. His toe had struck the protruding edge of a badly rusted kettle. The cover had been partly torn off, and to the very top of the vessel was heaped with double-eagles of gold

Thrill upon thrill ran electriclike through him. Weariness left him as if at the swipe of some mighty hand. With the delirium of joy obsessing him, he knelt above it in the fixed stare of a trance.

Broken threads of fancy danced up and down before him. A vine and tree shaded home somewhere, with a white-gowned woman stooping above the flower-beds in the yard, extolling neighbors, balmy breezes in summer, a crackling fire in winter, unsightly things draped, hard surfaces cushioned, and all that money stands for, drifted like enchantment into the reddening meadows of his dreams

Dead twigs snapped in the timber to the right. He sprang to his feet. Every sense was suddenly alert. Was something about to come between himself and what this gold stood for?

He listened intently. The silence was broken only by the click of his rifle-hammer as he half unconsciously drew it back.

Concluding that it was nothing but a soft-footed lynx or some other forest animal, he laid down the gun and again knelt over the yellow pieces.

Lovingly he placed his hand on the shiny disks. Lifting one a few inches, he let it fall back on the pile. The mellow clink rang through him, and seemed to echo back from far-off places where the good things of life were waiting for him to come and take them.

Drawing the hunting-ax from his belt, he sank the keen edge into the hard ground about the kettle, heeding not that it might strike onto rocks—for what was an ax-blade now?

With a powerful wrench he tore the iron vessel from the loosened earth. Filling up the hole and effacing the signs of his discovery, he gathered up the accouterments and hastened to his cabin as fast as the heavy load would permit.

Cautiously closing the door behind him, he threw off the pack, made a paper curtain over the one window, then poured the contents of the kettle on the floor in the center of the room.

Ah! the ring of the yellow pieces was music far beyond all earthly tones. There might be spheres where other sounds meant more, but not so of this planet.

He counted it off into stacks with the leisure to which things of great value are entitled. Fifty thousand dollars exactly was the amount! Enough to make his trail through life a path of joy.

Slowly, one by one, he dropped them back into the rusted kettle. The clink of each coin was a new draft to his mind. He played them into the vessel lingeringly, half fearful lest they melt into air and pass from him. Then he placed the treasure beside a chair, laid his rifle on the floor beside it,

and sank down easily to recall his scattered senses.

From whence had this gold come? What hand had buried it in the timber years before a trail was made above it? Was it a miser's hoard, the proceeds of a great robbery in the days when the West was rife with such bold escapades, or the cache of an Eastern embezzler?

Why had no one returned to claim it? Why had the kettle rusted all these years? What had fate meant by leading him back and forth over the trail until the path was worn down to the treasure? These and many more questions he silently asked.

From the unanswerable he turned to speculate on the wonderful things he would do. Not more than twenty-five years of age, the mate-call came uppermost now that an abundant sustenance was assured.

He was back in Norwalk instantly. Yes, they told him, Ethel Kiefer was still pounding a typewriter in the grouchy real estate man's office. With a sweep, he cleared the board of her life of such sordidness. The creative light glowing in her eyes, and her breast quivering with mighty passion, they went to live in the long-coveted old brick mansion.

Faithful friends came next. A lift to a cigar-store for Keller; a news-stand for the crippled kid who used to go to school with him; a cottage for the old man and woman who had to wash windows for a living; and so on—a list long enough to have swamped a millionaire.

It was great to see their tired faces brighten as he held up the lamp of hope.

So from the brick house, where his life was so completely rounded out with joy, he went forth doing good and brightening faces to the end of his time.

But Mark was tired. The powerful stimulant began to lose its potency. Bone and muscle began to complain again, and his lids to droop.

He had overtaxed himself the last few days, and exhaustion crept over him. He was too weary to rise from the chair and go to bed; he was half afraid to lie down, lest something might happen to the gold.

Twilight was coming on. The weight on his eyelids grew heavier in spite of his effort to keep awake. As a final caution, he took up the rifle, laid it across his lap, and pulled back the trigger.

Then consciousness began to fade from him like the gentle lift of vapor. He did not sleep so soundly but what he heard a light footstep outside. Then the door began to squeak on its hinges, and the step sounded on the floor.

It was coming toward him cautiously. It reached his very side. He could hear the bated breathing and the rattle of the bail on the kettle as it was lifted from beside his chair

He tried to awaken, but something held him fast. He wanted to shout, but his voice would not utter. He tried to pull the trigger, but his finger would not tighten. A cold horror swept over him. The footsteps were retreating through the door, and the gold and all it stood for were going out with them.

With one mighty effort Mark Gardner tore himself from the embrace of sleep. Struggling to his feet, he made for the door. The thief was just entering the forest at the edge of the clearing on the trail that led off toward a creek.

He started after the fleeing man, but his legs wabbled. He drove them to action in a few rods, and dashed in pursuit. All that the money stood for put more and more strength into him. The quivering breast aching to be loved, that would pass out of his life if he failed to overtake the man, filled him with madness.

He tore frantically down the trail as if his very being depended on the outcome.

The man could not travel fast with the weight of the kettle, and Mark came in sight of him soon. The fellow saw him, and left the trail and took to the right through the dense timber. Mark knew the ground well, so he made a short-cut on him. The man came to an open spot. Mark was close behind him.

The fellow sped across this, but was compelled to halt at a steep bluff. Now Mark had him.

"Drop that money!" he shouted.

The man set the kettle down, and turned to face the rifle. Mark came up to within a few feet of him.

"Now move off away from it," he ordered.

The man hesitated. Mark repeated the command, placing the gun to his shoulder as if about to enforce it.

"Don't get gay with that rifle," the man ventured boldly, "because my pal is back of you there in the timber with as good a one!"

The quick ruse worked. Mark swung

round to look. The act was fatal. With one leap the man had hold of the rifle, and a desperate struggle for possession of it began.

The stranger had considerably the advantage in size, but not in age. He seemed more than twice as old. His hair was white, and his face was seamed with deep lines where long years of sorrow must have run. His breath came short, and a small red spot glowed in each cheek.

Back and forth across the open space they crowded each other. The stranger was much the stronger man of the two. A number of times he twisted the gun completely out of Gafdner's hand. He could not get time to use it, however, as Mark instantly closed with him.

One of them pulled the trigger in the struggle, and the gun was discharged.

Darkness began to creep from the trees to envelop the open space, but still the struggle went on for possession of the rifle, which meant possession also of the treasure.

Neither seemed able to wrest the gun completely from the other. The worn-out body of one was counterbalanced by the short breathing of the other.

It occurred to Mark that his adversary must also be possessed of a madness for what the gold stood for.

In crowding each other about near the edge of the cliff, Mark stumbled to his knees. The force of the fall loosened his hold, and the man jerked the gun away from him.

The fellow jerked so quick and hard, however, and Mark let go so easily, that the rifle went on over the bluff to the rocks forty or fifty feet below.

Both dashed toward the kettle. The stranger was ahead, and Mark grabbed him. He struck Mark a blow in the face. Mark retaliated, and a fist fight commenced.

A rising moon dispelled the crowding darkness some, and lent a weird effect to this singular forest battle.

The stranger, as before, had the advantage in size and skill. He beat his smaller antagonist back. The only weak spot Mark could find on the other was his stomach. To this he vigorously turned his attention.

The man groaned from the steady hammering on his vitals. His own blows eased off into gentle taps, and his legs wabbled under him.

Seeing his chance, Mark clenched, threw his man to the ground, and gripped his throat, their bloody faces almost rubbing together in the struggle.

When he began to believe himself victor, and thought the man fully conquered, he felt the blade of a knife biting into his back below his left shoulder-blade. He sprang up, dragging the man after, while the knife-point sank deeper and deeper.

He tore himself from the fellow's clutch and staggered backward. The man rushed, stumbled, his arm struck Mark's shoulder, and the knife went out of his hand.

In an effort of each to get a hold on the weapon, whose long blade glittered in the moonlight, they crowded each other back and forth over it a dozen times.

The stranger seized the blade once. Mark put his foot on it, and the other gashed his hand badly.

Time came when Mark got the knife by the handle. It gleamed a moment in the moonlight above his head, then was hid with a flash in the stranger's breast.

The man sank to the ground. Mark dropped the knife, spun dizzily a time or two, then stretched his own length on the forest arena.

The moon lifted above the tree-tops and glittered on the kettle of gold and the knife-blade. Still Mark lay quiet, while the weight in his breast grew larger and his breath came harder.

A wolf sent up its mournful wail in the deep timber not far away, and the white-haired man raised up and crept slowly toward his antagonist.

Mark met him half-way. They came very close to each other, as neither could speak above a whisper.

Now that the stone in his chest was pressing so hard, Mark felt that he wanted to talk to this mysterious man who had fought so valiantly to possess the treasure.

"I've only got about two-thirds of a lung left, or this fight would not have ended the way it did," the stranger whispered across the three or four feet of space that lay between them. "I've seen the time I could have tossed you over that cliff with one arm!"

"I don't doubt it," Mark readily agreed. "But, say, how did you know about that gold? Did you bury it in this forest? You did! Where did you get it?"

He was fighting to regain his breath as he spoke.

"It don't matter where I got it. I paid for it. I paid an awful price. I paid for

it in the coin of twenty years' confinement. Society took a great chunk from the best part of my life, and said they were satisfied. It is mine. You had no right to fight me for it. Tears, sighs, groans without number, I paid for it. All the pains that brain and nerves can feel, I paid. You had no right to fight me for it!"

"But I didn't know that," Mark broke in feelingly. "I thought you just a thief trying to rob me of what the gold stood for—and it meant so much. It stood for about everything there is to a man when he's young. A bride, a house, clean things around, close contact to the smartest and best, all these and more it spelled."

"Yes, I know," the man interrupted him. "It meant the same to me when I took it. I had no intention of doing anything but good. But the State did not ask: 'Is this man's heart tender and merciful?' It did not say: 'Stop a minute. We will look. We will see whether his intention is to add joy or sorrow to the human sum.'

"Those questions are illogical, the State says; and logically it said: 'Some one has done contrary to the books. Have him step in while we start the big machine. What number did the machine stop on, judge?'

"'On twenty,' he replied, looking over the top of his glasses. 'Very well, we will put him in another machine, and when it grinds out the twenty we will be satisfied.'"

A fit of coughing interrupted him for a while. The moon lit up the remainder of the small arena and shone like silver on his white hair. The wail of a wolf grew nearer. The man drew a little closer to Mark, and proceeded:

"In the last machine a warden domineers and orders the different instruments of torture applied. Guards, the expression of whose faces are a cross between that of a rattlesnake and a butcher's dog, insult and beat you.

"You cannot cry beyond the walls, for they are thick. The ducking stool bloats one until he faints. A few kicks revive him, and the sanded paddle beats his flesh to jelly. The microbes of the dungeon eat out his lungs. And then a man wearing a long, black coat comes on Sunday and says there is a God in heaven!

"Say," he questioned, after the cough had stopped, "what do you think of the life across the gulch?"

"Well," Mark whispered faintly, "it's a dead sure thing that there was a trail into this world for us all, and why shouldn't there be one leading out?"

The man was silent for some time. Finally he moved up closer and laid his hand on one of Mark's.

"I guess you're right, pardner, but you know it's easier to keep faith where free fields are changing their colors around you than it is where vermin dwell in your blankets and rats scamper between your feet.

"You know what I intended to do with that money?" he asked presently. "I wanted it for my niece. She kept me from going mad. One letter a week she wrote me for twenty years. It was the rose climbing through the grated window to bloom. While a man beat me, a woman loved me. So you see, if the man in the black coat had said there is a goddess in heaven, I would have believed even him."

The weight in Mark's breast grew unbearably heavy. His head was dizzy, and the broken whispers of the man beside him sounded far off.

The quivering breast waiting to be loved, the gold and all it stood for passed out of his mind, and lights began to flare up and down on a far horizon. They seemed to grow brighter as he watched.

"You know," went on the man, seemingly determined to confide to the last, "when I passed through my former home the other day, I found that all the things I intended to do before they put me in the machine had been left undone. Weeds flourished where I would have spaded, and nothing grew where I would have watered.

"And, say, the judge who saw the machine stop on twenty committed a crime a few years later. Nine of the jury got into disgraceful scrapes that I would not have harbored then.

"You see, their hearts were not as good as mine. They had no right to judge me, had they? Even now, with the marks of the sanded paddle on me, I would not do what the judge did. Out of respect for the woman who wrote me one thousand and forty letters I would have walked upright."

He could talk no more. The wolf howl sounded still nearer. The moon hid behind a passing cloud. The lights that Mark had been watching flared up and out into a broad sheet.

He tightened the grasp on his companion's hand, and whispered very faintly:

"Come on, brother, I see the blaze! I see the trail!"

WATER-TANK WISDOM.

BY CHARLES ALBERT WILLIAMS.

IT is always easy to read the danger-signals on the other fellow's main-line.

Punctuality is a pretty good thing. What would time-tables mean without it?

Even engines made in the same shop don't all act alike. Be yourself; don't imitate.

Finding money between the rails won't prove your efficiency as a maintenance-of-way man.

Disregard the man who talks too much. He'll develop a hot-box and find himself stalled after a while.

A brakie who spends most of his time getting other people's goats usually doesn't have much else collected.

The difference between you and a mechanical thing is a brain. Do you take advantage of that difference?

Lack of confidence is a brake; self-reliance is steam. If an engineer wants to make time, which does he use?

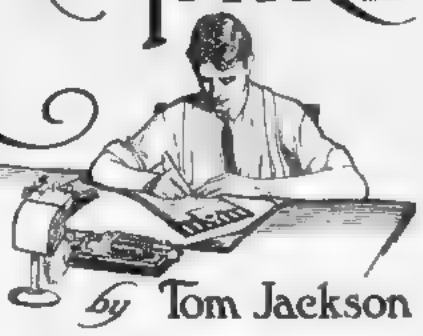
Too much steam will blow up a boiler; enough means good going. Talk without action amounts to the same thing.

Tackling a new job is like going around a curve. Slow down a bit, and be sure the lights are right before you hit your pace.

It's a long hill that hasn't a summit—but proverbs pull no freight. Say comforting things if you want to, but don't forget to heave fuel.

A pusher-engine wouldn't be a pusher unless it pushed. If it's your lot to be a pusher, be a good one. Give the other fellow a vigorous boost every time duty demands it.

TALES of the THIRD TRICK



by Tom Jackson

KATE SHELLEY'S GREAT ACT.

How She Saved a Fast Passenger-Train from Destruction.

WHEN the Northwestern appointed Kate Shelley station-agent at Moingona, Iowa, old-timers in that locality recalled one of the most thrilling stories of heroism in the history of railroading. Their thoughts went back to the night of July 6, 1881, when the pluck of a pretty sixteen-year-old girl saved a crowded passenger-train from what would have been certain destruction.

One of the worst storms in many years was sweeping over Iowa that night. The rain fell in torrents and the wind blew furiously. The Des Moines River was swollen until it swept over its banks. Before morning eleven of the twenty-one bridges in the Des Moines Valley on the main line of the Northwestern were carried away.

In a little cottage near Boone, Kate Shelley stared out into the storm and thought anxiously of her father, who was a section-foreman on the road.

"I've never seen such an awful night as this," she said, turning to her mother, "and I'm worried about poor dad. I've a good mind to go out and look for him."

"What!" cried her mother. "You wouldn't get half a mile in a storm like this. Don't be foolish."

The girl was beginning to argue the matter, when suddenly a terrific crash and the hiss of escaping steam rose above the roar of the gale

Both rushed to the window, and a huge lightning-flash made apparent to them what had happened.

A helper-engine that had been sent out from Boone on account of the storm had crashed through a trestle to the creek below.

"I must go, mother," cried Kate. "Think of the passenger! It's almost due!"

Her mother clung to her, trembling, but the girl broke away. She picked up a lantern, threw a coat over her shoulders, and rushed out into the storm. She climbed down a steep bluff to the edge of the creek close to the overturned engine and the wreckage of the trestle.

A deep groan startled her. At her feet lay a man almost unconscious. He was Ed Wood, the engineer. Near by lay Adam Ager, a brakeman, with both legs broken. He told her that two of the four men who had been on the engine had been drowned.

She dragged the two men to a more sheltered spot, and hurried on. She could not wait to do more for them; she must save the train.

Following a rough path along the creek, she crossed, climbed to the track, and ran along the ties. As she ran, the gale blew out her lantern.

Then she knew that her only hope lay in reaching Moingona, for without a light she could not warn the train herself.

But Moingona was four miles away, and the night was so black that she could not see the ties at her feet. The rain drenched her to the skin, and the wind almost carried her off the embankment.

Half a dozen times she stumbled and fell, but the thought of the oncoming train gave her courage, and she rushed on steadily through the darkness.

Soon she heard the roar of rushing water. She knew what that meant. Before her was the Des Moines River, and between her and the other side lay a trestle half a mile long.

Could she cross that trestle in the pitch-darkness, with a gale blowing.

She had never done so, even in the daytime, and she had her doubts. For the first time she hesitated. Finally she plucked up courage and, reaching the trestle, sank on her hands and knees and crept out over the torrent which she could hear roaring below.

It was all she could do to hold her balance against the driving wind.

It was slow work, that half-mile crawl, seeing nothing and groping in the blackness for every new hold. Always there was the fear that the train would catch her before she had reached the other side. Once she thought she heard its whistle, and gave herself up for lost.

She stopped and listened. She was sure she could hear it coming along the rails. She peered ahead fearfully, expecting every moment to see the glare of the engine's headlight through the rain.

It must have been the noise of the storm that startled her, however, for the headlight did not appear, and once when the lightning flashed she saw a clear track far ahead.

At length, the trestle was crossed. Reaching the solid embankment, she ran at top-speed toward Moingona station. She felt that the train must be very near, and every moment counted.

Half an hour later the station-master at Moingona looked up in astonishment to see a hatless, rain-soaked, white-faced girl hastily enter. At the same moment, above the bellowing of the gale, came the long-drawn screech of a locomotive whistle.

The girl clutched him by the arm with a choking cry.

"It's coming!" she gasped "Stop it! The trestle's down!"

He did not stop to hear more. Grabbing a lantern, he dashed out to the track.

Not an eighth of a mile away was the ghostly glare of the engine's headlight glimmering through the rain. A moment later the engineer saw the swinging signal-light.

The train, which otherwise would have run through Moingona without stopping, came to a standstill at the platform, and the crew piled out into the wet and crowded around the station-master.

He turned to look for the girl. He did not know until then that she had fainted and was lying in a heap in the station doorway

They brought her back to consciousness a few minutes later, and she told her story. The effect it had upon the passengers was remarkable. The men cheered her again and again, and weeping women rushed up and threw their arms around her and kissed her.

A hat was passed through the crowd, and soon it was half filled with greenbacks and silver, as a reward for the girl who had saved their lives. There were almost three hundred persons on that train, and there were few who did not contribute to the fund.

The train ran on as far as the wrecked trestle, and then Kate Shelley piloted the crew along the devious path to the overturned engine, where Wood and Ager were rescued.

One by one the railroad men stepped up to shake her hand and thank her for her brave work, and the exhausted girl dragged herself back to the little cottage where her mother was anxiously waiting.

"I've saved the train, mother," she said faintly as she crept in wearily.

The Northwestern presented her with a gold medal and a life pass. The State of Iowa, filled with pride over the heroism of one of its daughters, appropriated five thousand dollars for her benefit.

With the money she bought a farm and built on it a house whose windows overlook the railroad, for she wanted to live where she could see the passing trains.

Twenty-two years later the Northwestern, on opening its new Kate Shelley Bridge across the Des Moines River gorge, had to shift its track out of sight of the cottage. This was a hard blow to the heroine, and she determined to apply for the place as station-agent at Moingona, that she still might watch the trains go by. The railroad lost no time in granting her application.

HUNTING THE HOLD-UP.

A Wild Chase with False Whiskers and a Broom Brigade.

"TALKING about hold-ups," said Mr. Douglas, the agent at Lexington, "the most daring robbery ever practised in this part of the country, to my notion, happened about a score of years ago at Driftwood.

"I was working third-trick at Kimball at the time. Kimball is the first station north of Driftwood; then comes Nelsons, a town of about six thousand population. Kimball, Driftwood, and Bellmont were small mining towns.

"When I stepped off the passenger-train to take up my duties for the night I could almost feel that something out of the ordinary had gone wrong.

"You know there are times when something terrible is about to happen; some superhuman instinct has warned you of its coming, although you cannot tell from what direction to expect it.

"That was my feeling on the night of the hold-up. I walked into the office, expecting to see the mangled body of some unfortunate person stretched on the floor, some person who had met his death under the wheels or fallen from the semaphore. But no such sight was there.

"Instead, I saw James Lodz, the second-trick man, leaning nervously against the desk. In one hand he held a rusty road-spike; the other rested on his hip, as if he was about ready to draw a revolver. His hair resembled porcupine-quills.

"I asked him what he meant by such action, but all that he could do was to hit the spike against the desk and open and close his mouth like a fish.

"I shook him until he was able to gasp 'Driftwood! Shot! Robbed! Marple!' and a few other incoherent words, which I put together and made out that Marple had been robbed and probably killed at Driftwood.

"When I got this information pieced together, Jim came out of his demented trance long enough to give me a minute account of what had happened.

"It seemed that about eight-thirty, Marple was at the desk writing a letter. Two masked men walked in, and one covered him with a gun and demanded him to throw up his hands.

"While he was obeying the man with the gun, the other robber not only rifled the safe, but took all the money in Marple's pockets.

"It amounted close to fifty-eight dollars; wasn't much, but enough to start the police on what I think was one of the most remarkable man-hunts on record.

"After the robbers had departed and Marple had his nerves well in hand again, he sent a wire to Bellmont, asking Hogan, who was working 'second' there, to notify the police and the train-despatcher.

"That was how things stood when I arrived at Kimball ready for work. Jim had sent the entire story over the phone just a few moments before I made my arrival

"Jim understood that the men were coming in the direction of Kimball. That was the cause of his peculiar actions. He was afraid they would make a raid on him, too, but they hadn't put in an appearance.

"While he was giving me the information, a boy rushed in and said they had word of the hold-up. He reported that his brother had seen two tough-looking characters sneaking along a fence running from the wagon-road to the switch.

"The boy said that the men seemed to have a nervous desire not to be seen

"I called the yard-office at Nelsons on hearing this, and told them to give the news to the police.

"I had just put up the receiver, when I heard 'March!' spoken in the sharp tone of an army officer.

"I walked to the door to see what it meant. At the far end of the platform I could see in the dim light a dozen men armed with guns, revolvers, and clubs.

"I heard the command, 'March!' once more; then the mysterious squad started down the platform.

"I caught a glimpse of Mallard, the first-trick man, in the front ranks, swinging a broom and giving commands like a Cossack driving a bunch of peasants to the gallows. They marched by the office with all the solemnity of men who were about to perform some great deed.

"I asked a boy shivering by my side what it all meant.

"'They are going after the robbers,' he replied.

"The same fear that struck Jim began to creep through my mind. I wondered if the bandits were hiding in some fence corner, waiting for the opportunity to hold me up when everybody had left but myself.

"I hadn't a gun, should this come to pass. With fear in my breast, I returned to the office. I would put on a bold front in Lodz's presence. I wouldn't betray my nervousness.

"I told him he could go home, for there was nothing he could do in running down the culprits.

"He declined. He said that he wasn't going to take any chance getting murdered.

"'They are liable to be waiting along the roadside ready to administer the death-blows when I get within reach,' he said.

"I tried to convince him that the robbers were not within ten miles. I told him I would try to borrow a shotgun at one of the

houses near by, but even with a gun for protection he would not leave.

"The police at Nelsons, on hearing that the men were headed that way, divided their force and started toward Kimball. Some went down the railroad-track, and others took the wagon-road.

"Both parties were armed with guns, and each man had an electric search-light. They advanced like a squad of lightning-bugs. If the bandits had been going in that direction, they probably would have detected them, and would have remained hidden until the sleuths had passed.

"There wouldn't have been much danger in the posse discovering anybody in the bushes on either side of the road, for they went straight ahead, as if they were walking through a large cañon with no chance to climb out.

"When they were within a mile of the office they met Company A of Kimball arrayed for battle, ready to stop, shoot, or run in any unfortunate person who made an appearance.

"After both companies met and reported that neither had seen the enemy, they marched in the direction of Kimball, with the funereal populace of that town bringing up the rear.

"The police who came down the track were more successful than the others. They arrested a couple of hoboes whom they found in a box car, and had them scared half to death while they were searching them for the spoils of the robbers.

"Finally the man at Driftwood called me on the block wire, and said he had seen a couple of men at the lower end of the switch there. He thought they boarded a train headed that way, but it was so dark he was not certain.

"I told the police what I had heard.

"'Line up, men, on each side of the track!' ordered the chief. 'When the train stops, shoot the first man you see trying to get away!'

"They swung into line. Their forces had been increased by several other men. Each had a determined look, and all were bloodthirsty for a chance at the enemy.

"The train came along and whistled for the station. The engineer saw the red light of one of the "bandits," so he put on the emergency and stopped a few feet from the depot.

"The police looked the train over from engine to caboose, but found no robbers. However, Mallard, the first-trick man, made a catch.

"He was walking along close to one of the cars, looking for the hold-up men, when some one pounced on him from the dark, grabbed him by his collar, and struck him with a club.

"Mallard screamed like a catamount at bay, and tried to break away. Realizing that he couldn't break loose, he battled fiercely with his opponent.

"They fought for five minutes, neither gaining an advantage. No matter how hard Mallard would try to get away, his friend would hold on so much tighter.

"In Mallard's blind excitement to make good, he gave a sudden lurch forward, which threw his opponent off his balance, loosening his hold on Mallard and stumbling to the ground.

"Mallard, realizing he had the advantage, abandoned all thought of running. Instead, he jumped on the fellow, and held him pinned to the ground until help arrived.

"The first policeman to arrive on the scene flashed his light in their faces. There was an awful outburst of surprise.

"Mallard had been fighting his brother. Each thought that he was fighting one of the outlaws.

"After the police saw that they were on the wrong trail, the chief said they had better retire for the night, so they went home, to let the bandits roam unmolested.

"I never passed such a night. After everybody had gone and I was left alone, at every little noise, no matter how faint, I would jump and grab a hatchet I placed within reach on my desk.

"I would sit for ten minutes at a time, scarcely breathing, unless something happened that I could not distinctly hear. I certainly was glad when daylight came and I was still alive.

"That day the chief investigator of the road — a *Sherlock Holmes* by instinct — came down from headquarters, carrying a magnifying-glass as large as a window-pane, false whiskers, and a gun. He was ready for any emergency.

"He viewed the nerve-racked Marple, and asked him if the men were fat, large, or small, and had coarse or musical voices.

"He brought his magnifying-glass into focus on several articles the men were supposed to have touched. He walked around the office with his chin on his chest, looking for footprints on the ground.

"Then down to the corn-fields he walked, and from there back to the railroad. Then he got down on his knees in the middle of the track and looked through his lens.

"We were watching him all the time to see what developed. I had made it a point to be there, for I wanted to follow every detail of his mysterious movements.

"All at once he gave a yelp like a blood-hound striking a scent, and started down the track at a mad rate of speed.

"We followed him about a quarter of a mile; but his pace was too fast for us, so we returned to the office. I called Bellmont on the wire, and asked him if our man had arrived there yet

"He said that a man answering our description had passed through there not more than twenty minutes before.

"He was going at a tremendous pace, and looked neither to right nor left, but straight ahead, as if following some unseen object.

"We thought he had struck a trail sure when we heard that.

"It was several days before we got news of him again.

"Every night we operators would bar the doors and latch the windows, as if we were expecting an attack from a tribe of hostile Indians.

"In a few days Marple got a message to hasten to Alexandria to identify a man our sleuth had captured.

"It seemed that he struck a valuable clue that day when he made the examination in the middle of the track, and which was the cause of his hurried departure. He found a piece of clothing, and remembered that it was part of a disguise worn by a man he had seen boarding a freight.

"The detectives put this man through the third degree. After an hour of this treatment, he confessed, told the whole plot, and said that he and his pals had intended to rob Kimball the same night, but were scared away by the police. His accomplice was caught after a running fight. Both were sent up."

WHEN FAVORS ARE ASKED.

Old-Time Drummer Relates Some Unusual Instances of Railroad Kindness.

"RAILROADS have always been good to me," said Walter Wheaton, one of the old-time Chicago drummers, as he cuddled close to the stove in the little New England way-station. He was pounding the ear of the third-track man while waiting for a snow-bound passenger.

"Yes," he repeated, "the railroads have always been good to me. And, say, cully, I've slept on so many sleepers that I can't get a good night's rest in a bed any more. I want the roll of the wheels and the music of the bumps to put me in the arms of old man Morpheus. Gee! If I was on a train now, I'd fall asleep like a baby, but all I can do as a substitute is mope around here and talk to you."

"How do you figure that the railroads have always been good to you?" asked the third-track operator.

"I'll tell you. I'm sore on the politicians messing up the railroad business. I am in favor of the roads running their own affairs.

"It is not to their interest to do anything inimical to the general welfare of the people. I speak of the railroad business as I do of individuals—as I find it.

"Aside from paying my fare, I have never contributed to the income of any railroad.

"I have never been the beneficiary of any company over whose lines I have traveled, at least in dollars.

"But inasmuch as legislators have seen fit to hammer railroads, I would like to tell you of some of the good things I have known about the roads.

"Once I was in Leavenworth, Kansas. I received a wire from my house in New York to make a certain point as quickly as possible. I found that the first train out of town in the direction I was to go was scheduled to leave in eleven minutes.

"By the quickest conveyance at hand, it would take me fifteen minutes to get to the station. My business was important. I telephoned the station-agent, asking if the train was on time. He replied that it was.

"I asked him if it was possible to hold the train five minutes beyond leaving time. To my surprise, he said he would do it.

"When I reached the station the train had arrived. The conductor was on the platform with his watch in hand. As I jumped out of my conveyance he asked me if I was the man who wanted the train held.

"When I replied that I was, he told me to jump aboard. As I did so, he gave the engineer the signal to pull out.

"The train was under headway before

I was in my seat. When the conductor came for his fare I thanked him, and then expressed my surprise, for I was only a private citizen.

"I suppose I should have been satisfied, but my curiosity had the better of me. I remarked to the conductor that I did not understand why an exception had been made in my case.

"He replied that railroads were run according to common-sense rules, and he guessed the engineer knew where he could make up the lost time.

"'That's his business,' said the conductor.

"Now, that may seem to you a little thing. The holding of that train saved my concern ten thousand dollars. That accommodation got a big customer in the line of subsequent shipments for that company.

"Maybe you think the railroad company did that for policy. Well, I'll give you an instance where nothing of the sort could have entered into the granting of such an accommodation.

"I was in a small town in Minnesota. I received a message, forwarded from St. Paul, that my daughter, an invalid, was on her way East from Colorado.

"The train on which she was traveling would pass the station of the town where I was, but it would not stop, and it was due to pass in one hour and forty minutes.

"The station-agent had no authority to flag it. That could be done only by an order from headquarters in St. Paul.

"I sent a message to the general superintendent. The operator put the message on the wire as I dictated it. It totaled one hundred words, for I had to explain the importance of the request.

"In less than twenty-five minutes a reply came that the conductor had been instructed to pick me up. That was the longest twenty-five minutes in my life.

"When I saw the train coming, a mile away, I could have fallen on my knees. When the train stopped at the little station, and the conductor jumped from the platform of the first car, I sure did grip his hand.

"He almost lifted me to the coach, and before I was snug in my seat the train was under way.

"I believe that my totally unexpected appearance saved my daughter's life

"After I had written a letter to the president of the company—and it was the best letter I ever wrote—he replied in a businesslike way, which is now in a frame in my library.

"'Glad to serve you. Don't mention it.'

"He had never heard of me before. I don't know that he has ever heard of me since; but I think I have sent that company some business which it might not, otherwise, have received

"I'll tell you another, as that train hasn't whistled yet

A young man of my acquaintance, whose family was dependent upon his earnings, was stricken with a malady. He was a promising young fellow, and his wife was a devoted help. A consultation of physicians decided that if the invalid could reach Mexico he might recover.

"Mexico! That was as far away to the sick man and his family as Europe. I don't know just how it was done—and it makes no difference—but a big-bug of one of the trunk lines heard of the case.

"He sent the invalid and his wife across the continent to the land of hope without the expenditure of a dollar to the young man. Not only that, but when the sick man reached his destination he found an American physician to meet him.

"In six months the invalid recovered. He returned home with his wife. The physician's bill was paid by the railroad official

"Some years later I learned from the young man whose life had been saved, that his father, a long time before, had been of some service as a country lawyer in securing for the railroad company the settlement of a claim in a right-of-way suit, for which he had declined to accept a fee.

"The father died not long after, but the railroad official had kept track of the son without his knowledge. Whenever there is any 'hollering' to be done for railroads, they can call on me."

You have heard of the men who thought train-orders said—well, the trouble was, they didn't think at all.

Mort Duke's Fire Run

By Lloyd Kenyon Jones

NO rain had fallen since May. The great north woods became tinder under the sun's relentless rays. By the latter part of July you could ford the usually turbulent Linden River at the rapids. Ten days after that decaying fish made it unbearable.

The bark peeled from the standing pines, and even the hemlock swamps went dry. The leaves on the hardwood ridges withered, as is their wont, after the first frost has nipped them. The wagon-roads were channels of fine, white powder that arose in stifling clouds when the horses plowed through it, snorting under the impossible loads of even the light buckboards.

The grain on the little farms in the clearings had shrunk and baked in the heads. Buzzing, insistent swarms of blue-bottle flies pointed the trails to cattle that had strayed in the timber and dropped dead from want of water and succulent forage.

We all knew what would come eventually. The smoke wreaths wafted over Hampton like filmy veils the first day, and the brass was pounding out the progress of the flames in the northern slashings.

On the 12th of August the sun began to take on a deep orange tinge, and the men, women and children who'd been through previous forest fires felt the cold fear climbing up their spines and gripping their throats with a dull ache. It doesn't get you all at once, but it steals on a degree at a time until it robs you of decision, purpose, and clear judgment.

Every hour after that conditions became worse. Farmers began to arrive in Hampton with what they could save, which was chiefly their lives. Still, we were tolerably safe, because the immediate environs of the town consisted of hardwood hills and cultivated meadows. It wasn't for ourselves we cared so much, but up-country we knew it was Hades.

The wind was out of the north, but it brought small change in temperature, for it was sweeping five thousand square miles of crackling pine-knots, bleached limbs, and standing timber—a fire-box large and hot enough to boil the Atlantic if there'd been a crown-sheet and tubes to distribute the heat.

On the 13th the sun merely looked down on us at brief intervals, like a dwarfed, inflamed disk, grotesquely suggesting a toy balloon hanging above the housetops.

On the 14th it didn't show at all, and eyes, nostrils and throats were swollen, raw and painful. Nobody sleeps much after the wood smoke sweeps down and permeates everything.

I have heard that volcanic ash will work its way even through hermetically sealed glass jars. Perhaps that's true, but it isn't much ahead of the white powder that settles down from the drab screen of the heavens when the woods are being offered up to the savage, crimson god of destruction

When the boys came in from the north they'd nearly drop from exhaustion and fear. Each crew brought new stories of dark desolation and more refugees. I guess

it was the plight of the poor devils that had been driven from their vanishing homes that kept the forces on the D. and N. even in the semblance of working order.

I was claim-agent, running out of Hampton and seeing to the company's interests whenever occasion demanded. I knew every foot of track up to the terminus of the Valley Division, which was Hemlock.

There was a group of us huddled around Al Densmore, the operator, as he read, in a dry, throaty monotone, the message of despair from that awful spot in the heart of the flaming slashings.

"People living in basements," the Morse told us, "and mobs are rushing into the churches, praying, cursing, and bellowing in their madness. Heaven knows what we'll do in forty-eight hours if it doesn't rain. Can't you do something for—"

The instrument stopped suddenly. Densmore thumped back his lightning, but there was no response.

We all knew what had happened. A tree had toppled, charred from the ground to its flaming pinnacle, and had crashed down on the wires. We wouldn't hear any more from Hemlock during the fire, and maybe never again.

On the 15th No. 4 came down. On the 16th No. 6 got through five hours late, with the windows yellow from the smoke and heat, and the varnish curling up on the coaches like scales on a sun-dried fish.

We were enslaved in that debilitating inactivity that claims men when they cease thinking and trust blindly in Providence. We hoped—and I dare say even the most hardened risked a prayer—because we realized that human aid had come to the taut end of its tether.

I say we felt that way, but Mort Duke was the exception. He'd been running out of Hampton for eleven years, first pulling freight, and later hauling passengers over the division. He'd got his original education running between the Junction and Hemlock, and that might have had something to do with it. He looked on those imprisoned folk as his neighbors, almost as his kin. There was another reason, too!

The officials of the road had debated the problem pro and con, and while they could get only the faintest sniff of the smoke down in their comfortable offices in the city, they'd graduated mostly where the elms, walnuts, oak, spruce, tamarack, and pines were thickest. They knew.

Hemlock, which was nothing but an aggregation of saw and planing mills and acres of towering lumber piles, had a pond. It covered eighty acres, and was fed by a creek and as much of the artesian overflow as the town didn't need. Its fire department was a small-capacity stand-pipe, the D. and N. water-tank, and about fifteen hundred feet of doubtful hose.

They trust to luck unreasonably in those backwoods places realizing that at any moment a stray spark in the dry season might lick them into eternity, leaving only an ash-heap to point where they and the village once had their being.

The call for volunteers came on the evening of the 16th, when every fan on the northern division was chafing under enforced idleness and an excess of time to contribute morbid thoughts to the disaster.

The railroad people had induced the fire department in the city to part with three fire-engines, as many hose-carts, and the experienced men necessary to operate the apparatus properly.

It was easy enough to get the layout as far as Hampton, because that run, at worst, contended only with the smoke, but up beyond—that was the problem!

Mort was pacing the platform like a panther suddenly tricked into captivity. I knew what was on his mind. Jennie Fisher was up in that helpless pit of flame. One could almost see grim grief stalking by Mort's side, solemnly keeping pace.

When Al interpreted the Morse, asking for a volunteer crew, not a voice responded. The boys faced death every day, it is true, but not of that brand.

"Do you hear what Densmore's reading?" I asked Mort as I hurried out to him.

He didn't reply, but looked at me blankly, with his eyes open wide and a green tinge showing beneath his features. His hands trembled violently.

"They want a volunteer crew to haul a special up to Hemlock," I explained, "and by midnight the train will be in from the city with three fire-engines and their crews."

"I'll go!" he whispered wheezily as he ceased his distracted walking and rushed into the crowded station office.

"I'll climb up on the right-hand side and stick there till we've landed in Hemlock, or popped open with the heat on the way," he told them with a metallic sob in his voice that made us wince.

The fellows hung back. We should have been ashamed, I admit, but there was a madness in Mort's eyes we didn't like.

Billy Weed came in at that moment. He'd been drinking, a fault Billy had when he was worried, and he regarded the challenge as an invitation to a gay lark. He's told me many times since that he would no more have volunteered on that job in his sober senses than he would have attempted to stop the fast mail with his right foot.

The company wouldn't let a married man go, and the minute the fellows knew that the benedicks became malignantly brave—to give their wives an opportunity to talk about their heroism, Billy Weed has since charged.

Sammie Witt in particular was loud in lamenting the fact that he was barred. Just then Sam's loquacious spouse came in and listened to her husband's blustering talk.

"Sure, let Sammie go. That's all right," she piped up, hep to the dimensions of the four-flush.

"I couldn't think of it," Sammie replied, turning deathly pale and quaking like an aspen leaf. "No power on earth could drag me from your side!"

"It ain't my side that's worryin' you none," his larger half retorted meaningly, placing her rough hands on her ample hips. "You're like the rest of the bunch—just plain thin-skinned."

That settled it. We had a crew picked in ten minutes, and started for the yards to select the cars.

"Don't take anything that's varnished," said Mort, as he turned toward the roundhouse. "Those new steel gondolas are the only thing. We'll put barrels of water in the corners of every car, and we'll rig up corrugated roofs on the ends, where you boys can keep clear of the fallin' sparks."

"SURE, LET SAMMIE GO. THAT'S ALL RIGHT," SHE PIPED UP.

Conductor Frank Mullins didn't dispute with Mort. We handed over the generalship to him without a question. All the boys guessed what was back of his energies. He went willingly; we didn't.

Axes, cross-cut saws, picks, crowbars, chains, and everything we could think of as necessary, went into the cars. We worked like Trojans, and we labored silently. Whenever we could talk by making signs, that was our method of conversation.

I will say, too, for Sammie Witt, that nobody worked harder, and I honestly believe if Sammie was sure he'd never get back to—but both of them entered the peace long ago, so I'll not comment farther.

By eleven-thirty we had everything in readiness, with food and clothing filling four of the cars. Every merchant, miller, and business man in Hampton contributed

with a lavish hand, not that we expected to find the sufferers who'd need them, but because we hoped blindly.

Mort had selected No. 718, the 4-6-2. He told me afterward that any other locomotive in the roundhouse would have left us all on the sacrificial altar long before we'd reached the Junction.

We didn't dare sit down and wait for the special to pull in with the firemen, because most of us might have quit. Mort Duke wasn't taking any chances. We had something to busy every man of us each minute, right up to the time we'd pulled out on the main line and coupled on the three flats with the fire apparatus.

As we sped past the station pretty nearly the whole town was down there to wave us good-by, but not a shout went up. They were all past cheering by that time, because there wasn't one that ever believed we'd come back to give an account of ourselves or Hemlock.

I was sitting back in the last gondola, when a thought flashed through my brain that set my teeth chattering. There was a frame trestle over Linden River. Suppose it was down!

I didn't dare speak of it, because I knew that Mort Duke hadn't overlooked an item. He was taking a gambler's margin, and all he could see was Jennie's face in the gray mantle ahead of the pilot, looking appealingly at him and urging him on.

For two hours, as we crept over the hot rails, nobody uttered a word. We were getting into the fire-zone by this time, and the burning trees were lined along the right-of-way like tall buildings with beacons blinking from a million windows. We had put wet sponges into our mouths, partly to cool the air on its way to our lungs, but mostly to avoid talking, and kept bathing in water from the numerous barrels

It was almost impossible to see beyond the sides of the cars, and long before we reached the Junction the firemen understood the brand of purgatory into which we were traveling. But they were game. It's part of the fabric of a fire-fighter, I presume, to be willing to look straight at death and never bat an eye.

The smoke was like a thick, saw-edged fog, with points of red flame protruding through the haze here and there. Four times before we steamed into the Junction we were called on to drag burning tree-trunks from the track.

Ordinarily, locomotive boilers lose through radiation, but this time old 718 was the gainer. The awful furnace boiled the liquor out of Billy Weed's brain in thirty minutes, and great welts arose on his arms, where the hot cinders had rained down on him when he rammed his shovel into the coal heap on the tender.

Some of the boys at Junction were passing buckets of water to others on the station-roof and saturating the shingles, while men, women, and kids were slapping the raining sparks with wet gunnysacks the moment the embers touched the planks of the platform.

It was merely a question of time. The station was the only structure left, and the town's forty-odd inhabitants had camped in the depot, and were struggling desperately to hold their own.

I held a lantern almost in the face of Agent Stevens, and he looked at me out of the rims of his blood-red eyes and laughed. It was deep, parched, and demoniacal, rising to a sharp scream.

They told me later that he went stark mad the day following and plunged into the blazing forest, where his white bones mingled with the destructive lye that eventually percolated through the hardwood ash.

The real fight started on the Valley Division north from Junction, where the great slashings had already been reduced to flaky, colorless heaps that tossed about us like a snow-storm from the blast furnaces of the Styx, and the live trees were sputtering and falling along the track. I knew there wasn't a telegraph pole standing, though it was impossible to see even so far as the place where the wire fence once designated the limits of the company's domain.

The ties were glowing at every few rods, and we didn't question for a moment that we'd come to a point where the warped rails would terminate. Then we'd wait for the end!

Three of us climbed into the cab, where we'd be handy when it came to clearing away obstructions. I glanced at my watch. It was three-twenty. Dawn was nearly two hours away.

Now and then we'd feel a jolt as the pilot engaged a roaring log, and we'd creep along the side of the engine, with the heat piercing through our leggings like countless electric points. We'd wind a chain around the fallen timber and pull it out of the way.

If it was too large and heavy we'd have to form a brigade and pass buckets of water along to drench the log sufficiently to attack it with our axes, and find the heart still as sound and white as the day it grew erect in the cool fastness of the woods!

Perhaps we'd proceed half a mile, and maybe not over a hundred yards. We repeated the muscle-tearing process until we lost count of the stops.

A few feet from the engine we could hear the fire roaring like the breakers when a heavy sea is running on a rock-bound coast, falling at times, then rising again to such heights that we couldn't catch the vibration of the axes in the timber not four feet from our ears

I'd just crawled back into the cab after an extremely fatiguing assault, and ducked my head in a pail of soot-stained water, when I caught sight of Mort's face. It was as dark as the blackest-visaged African that ever lived, and his puffed, purple lips kept mumbling something inarticulate.

"Where are we?" I asked him, as I stumbled over toward his seat. The heat of the reverse lever scorched my bare hand, and I cried with the pain. If he replied, I didn't hear what he said. But he *knew*. He'd been carefully computing our progress by every variation in the track.

A brilliant glow shone suddenly ahead of us. I figured it must be the dawn—as though I could have recognized sunlight with my blistered eyes.

Mort was leaning forward, and I saw the throttle come out an inch; then another notch or two, and the drivers gripped the dry rails with shrieking vengeance. The spurt of speed almost yanked me from my feet.

There was a pyrotechnic display such as I'd never seen before, and hope I'll never see again. The red tongues of fury licked up on either side of us, and the heat was white and blinding.

I sank to the floor of the cab, with every fiber in my body quivering, and then my nerve came stealing back. I got to my knees again, and started spattering water over the heads of Duke and Weed.

We were making a gambler's run over the wooden bridge that crossed what had been the Linden River!

The pitch was frying out of the ends of the heavy timbers and feeding the hungry

A BLACK BEAR CUB CRAWLED OUT OF A STONE CULVERT AND POKED ITS NOSE INTO MY FACE.

points of light that were never satisfied. I suppose the trestle had started to blaze only a few minutes before. The two hundred yards of river-bed had held it back, but the driftwood that had settled on the sand had trained the trail of devastation right up to it.

The hollow, reverberant thundering ceased, and I knew that the train was over that cobweb of danger. Going back would be out of the question.

It had been sheer madness for us to cut

ourselves off that way, but it was done—and we had to stick!

I guess when a man is convinced he's got the call he grows accustomed to it. The heat didn't hurt me any more. At times I shook with a chill, as my fever was coming on. I stopped thinking.

Once I reached for the bucket of water, and my hand shot six inches over it. I focused all my intellect on the achievement of that one thing, because if I lost control of my muscles I was better off dead at the side of the track.

I tried to laugh as I pulled the pail toward myself, and drank a deep draft of the foul fluid, with the cinders grating on my teeth.

I attempted to laugh, but the sound choked in my throat and strangled me

"Just five more miles!" Mort whispered in a dry, husky voice that was most unnatural, and I noticed then that the pall of smoke was altering to a little lighter shade. Somewhere to the east of that greedy furnace the sun was beginning to shine. It was looking down on yawning millions out of the confines of the holocaust, but the best it could do for us was add to our already unendurable burden of torture.

The chopping-squad was reduced to four of us after that. The city firemen didn't dare leave their engines, but they stayed nobly at their posts, never complaining, and never even so much as wishing they hadn't played the long hazard.

I took the count at the end of the next three miles, and a black bear cub crawled out of a stone culvert and poked its dry nose into my face and whined. They tossed the cub and me under one of the corrugated awnings, and poured a bucket of water over us. When that poor little singed beast had got his fill of the precious liquid he cuddled up to me, and we laid there together, he sleeping and I delirious.

When I finally opened my eyes I was lying under one of the hose-wagons, and could feel the incessant shaking of the earth caused by the steady rumble of the three fire-engines that were sucking up the curdled juice from the mill pond near by.

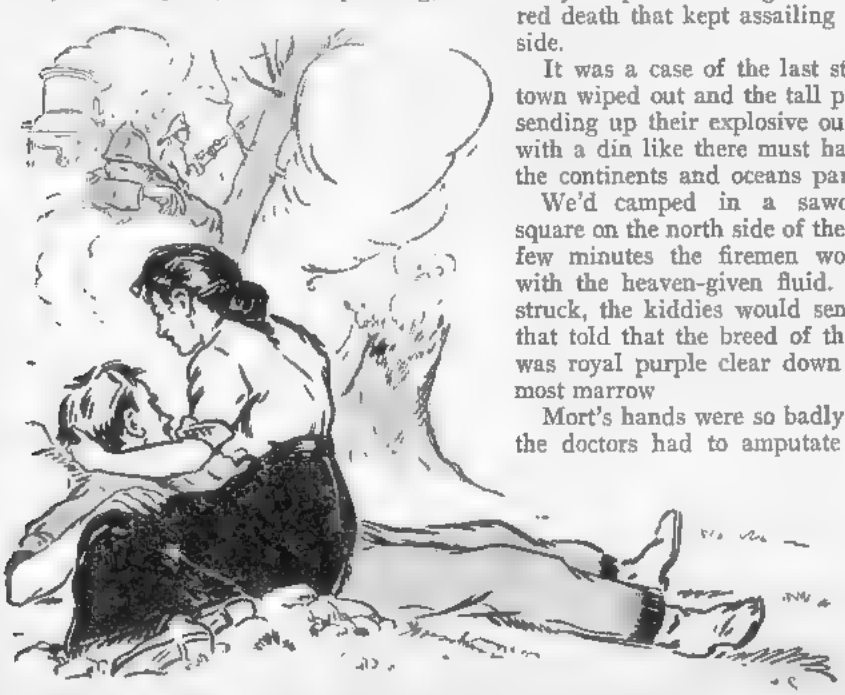
Mort lay next to me, and I could hear the sobbing voice of some girl as she fussed over him and called him pet names. Then I fell into dreamland again, with the whining of the cub sounding in my ears and echoing in my troubled dreams. From that time on he was my personal property, and I had him skinned when he passed up his easy job last year, a full-grown bruin that never would stop pouting whenever I was out on the road. The kids pretty nearly broke their hearts when he died.

The artesian well, twenty-six hundred feet deep, was still spouting, but we needed every drop we could get to fight back the red death that kept assailing us from every side.

It was a case of the last stand, with the town wiped out and the tall piles of lumber sending up their explosive outbursts of fire with a din like there must have been when the continents and oceans parted company.

We'd camped in a sawdust-carpeted square on the north side of the pond. Every few minutes the firemen would spray us with the heaven-given fluid. Whenever it struck, the kiddies would send up a shout that told that the breed of the timber tract was royal purple clear down to the innermost marrow

Mort's hands were so badly blistered that the doctors had to amputate the left one.



SOME GIRL FUSSED OVER HIM AND CALLED HIM PET NAMES

The velvety flesh from Jennie's right arm supplied the new covering for his right, and for a few patches on his seared forehead.

For forty-eight hours they stood their ground and fought with grim, prayerful determination. Then one of the fire-engines gave out; simply failed to respond. They kept up the battle with two, and finally with one.

It wasn't a case of good judgment, but dogged determination. Men won't die till they have to, when it's put squarely before them for a vote, and, besides, there was a fighting chance.

Suddenly, along toward the second night, a new light came from the upper darkness, intensely blue beyond description. It was followed by a deafening rumble, and then great drops of rain began raising powder-puffs on the pulverized earth.

By midnight the precipitation was a drenching drizzle, with the lightning flashing now and then, but growing fainter every minute.

Toward morning there was no more electric display, but the rain never paused a moment. We all slept out in it, too, wet to the skin, and asking the Powers beyond the murky blanket above us to put us in jeopardy of drowning before the storm was over.

The smoke still clung persistently to the ground, but the monuments of seasoned boards in the lumber-yards were giving up the fight.

The men formed themselves into well-ordered companies, and with long pike-holes they attacked the piles, pushing them over so that the beating rain could get to every surface.

I was pretty well bandaged, but my spirit had revived, and I helped as much as I could

The fire apparatus was put back into running order by this time, and the three engines cooperated with the downpour in combating the lurking danger in the yards. Once it gets a foothold it will hang on until every glowing ember is submerged in water.

The rain didn't let up for a second in seventy-two hours, and then we could see the low clouds scurrying across the heavens with the canopy of smoke high in the gloomy arch.

For a day thereafter intermittent showers would come pattering down, but the streams from the engines continued until rivulets of water were flowing through the tangled mass of lumber back of the mills.

The forest was draped in a shroud of unbroken jet, as though the mighty brush of a titanic painter had daubed every object with lampblack from a limitless caldron.

On the 23d the sun came popping into view, and every man, woman, and child in that God-forsaken refugee camp went wild with joy.

Only the smell of the great fire remained, and we were pretty certain that the storm had been general enough to completely stifle the conflagration.

The smoke hung over the Great Lakes for a week afterward, and the world accepted as final the belief that all of us had met our doom.

Mort Duke was still in the throes of his pulsing pain, but he called us together and insisted that we should do whatever lay in our power to start on the return journey to Junction and get word back to Hampton and the company.

Were I to live forever I'd never forget our tramp back over the right-of-way. A third of the ties were burned completely. The rest were charred or scorched. The rails were warped, curled, and twisted out of shape, lying in a tangled network across the road-bed.

It was a sixty-mile trip, and four days passed in making it. There wasn't a vestige of the bridge left at Linden River, but the water was pouring down, thick as ink, filling the stream from bank to bank.

With our packs, swimming was out of the question, so we rolled charred logs into the restless current, straddled them as though they were deep-sea monsters, and propelled ourselves with poles to the farther shore.

We landed half a mile from the right-of-way on the other side, so we camped on the bank of the river that night where we'd climbed up to the ash-coated clay.

There was a relief party in Junction when we got there, and within fifteen minutes the newly strung wires were purring with the message of our salvation to the endless millions who had waited breathlessly for word of our fate.

And believe me, the name of Mort Duke was the first that went bouncing over the copper strands.

Twenty-four hours of every day the construction crews labored on the Valley Division. The trestle was the hardest part of all, because the rains started in again, and kept the stream a seething mass of dark, ugly water and driftwood, with logs up-

ending as they disported themselves threateningly in the swollen stream.

In the mean time supplies were packed in and a ferry was put into operation, so that the horses would not need to risk their precious freight in the newly filled Linden.

When the first train came through it was the wildest celebration I ever expect to witness on earth. I'll wager they wasted four tons of coal just tooting that whistle as we rolled into what had once been Hemlock.

They lifted Mort's cot into the baggage-car mighty tenderly, with Jennie following, so he wouldn't miss his medicine.

When the boys saw that swathed stump where the left hand used to be, they knew that Mort would never grasp the throttle or toy with the brake-valve again.

And that fool bear-cub simply whined himself silly as he climbed up and tried to plaster my face with his bright red tongue.

He didn't leave me a moment, either, but stood up on his stubby hind legs and sunk his claws into my trousers when we tried to fight our way through the cheering, joy-mad mob at Hampton.

The president of the road made a speech when Mort and Jennie signed up for life.

He told Mort his working days were over, but do you suppose the old rascal would have it that way? No, sir! He insisted that Hampton was big enough to establish a flagman at the Main Street crossing, and that's where he's put in his time ever since.

The smell of coal-smoke gets into a fellow's blood and brain and becomes part of him. So long as he was still on the system he was happy.

I didn't go up to the chapel to-day, although I should have been a pall-bearer, but I couldn't trust myself. Ever since they told me he'd gone to the roundhouse for the last time, the past has been drawing moisture to my eyes.

Here's a rig now. Let's drop in at the rear of the procession. It's foolish for a full-grown man to act this way, but I wonder if Jennie and the kids will miss him more than the rest of us! I wonder!

That bell tolling solemnly in the ivy-covered belfry of the chapel in the grove is for Mort Duke. He'll never flag another crossing, and the boys will miss him. For eighteen years they've waved their hands to him as they passed, and felt better when they received his salute.

His children will retain the gold watch, that is studded with the diamonds and the sapphires. The contributions started with the president of the road, and even the section-hands insisted that they be counted in. It cost thirty-five hundred dollars.

Inside the case were engraved these words:

> To Mort Duke,
>
> From the United Forces of the D. and N.,
>
> In Token of Their Esteem and Friendship
>
> For Making His Famous Fire Run, August 17, 1893, and Saving Nine Hundred of His Fellow Beings in Hemlock.

JOHN BULL AND THE "K-2."

COMPARISON between the largest passenger-locomotives built for the Pennsylvania Railroad and the oldest locomotive in America shows the progress made since the first railroad train was put into service at Bordentown, New Jersey, on the Camden and Amboy Railroad in 1831—eighty years ago. The oldest locomotive, John Bull, is still intact at the National Museum in Washington. The locomotive which the Pennsylvania Railroad has adopted for heavy passenger service is of the Pacific type, and it is the most powerful passenger-locomotive in use on the Pennsylvania Railroad. The locomotive and tender of this new type, or "K-2," as it is called, when loaded with coal and water weigh about 430,000 pounds. The John Bull, loaded for operation, weighs 24,625 pounds, about one-seventeenth as much as the new engine, which has six driving-wheels eighty inches in diameter. The driving-wheels of the old engine are only fifty-four inches in diameter. The boiler of the new "K-2" type locomotive contains 359 tubes, each 20.9 feet long, making a total of nearly a mile and a half of two and one-fourth inch tubes through which the flames and heat from the fire-box pass on their way to the stack. The heating surface of the tubes is 4,420.6 square feet and, in addition, the fire-box has a heating surface of 199.3 square feet. This space is heated to a high temperature to convert the water in the boiler to steam at a pressure of 205 pounds per square inch. The tubes in the John Bull are seven and one-half feet long, and the tube heating surface is only 213 square feet.

Tower "DC"

by —— C. W. Beels

SYNOPSIS OF PREVIOUS CHAPTERS.

PENNILESS and an orphan at the age of twenty-two, John Williams, the narrator of the story, takes to the road and becomes a hobo. After a year's wandering he is befriended by one Pete Gleaner, agent at Grant Junction on the E. and W. M. R. R., who sets him to work unloading freight. The first night Williams is left to guard two car-loads of dynamite and is attacked by Pink Dayton, one of the men, and an accomplice, who believe him to be a detective. They take him to a lonely wood, bind him, and set a fuse to the box of gunpowder. He is rescued by Gleaner, but not in time to avert the explosion. Gleaner receives injuries which result in the loss of his reason. The following day Williams is accused by Pink Dayton of trying to burn the company's property and attempting the murder of Gleaner, his benefactor. Williams is taken to jail to await trial and while there is visited by Myrtle, Gleaner's daughter, who believes in him. She confides in him her fears of Dayton, who has shown her unwelcome attention. Later, word is brought to him that Myrtle has disappeared.

CHAPTER IX.

Brought to Trial.

ABOUT the most sublime farce that ever was perpetrated on that much-abused essential of our civilization—justice—took place in the court at Doran's Corners when I was placed on trial for the combined offense of attempting to destroy by fire the property of the East and West Main Line and, at the same time, to encompass the death of my most kindly friend, Pete Gleaner.

In that great Eastern State unto whose almighty laws I was amenable, how so unmerciful a man as Judge Fellows could have been permitted to sit on the bench, was more than I could comprehend.

No judge of a burlesque town of the West during its wild and woolly period ever showed a greater disregard for the law or the rights of a man who is supposed to be innocent until he has been proved guilty beyond all peradventure.

But in the wide range of travel that has been my lot since this particular chapter in my life, I noticed that the East and West are very similar except in certain phases of their larger cities.

What greater wilderness can be found than exists in the western parts of the massive States of Pennsylvania and New York? Who has not traversed the mountainous re-

gions of the Virginias without finding life in its most primitive form? Who has stood in view of the Laurentian Mountains of Quebec without a feeling of awe, and thought of penetrating their depths? Even in the little State of Rhode Island, there are places that have never been trod by the foot of man.

So, here in the East, I was in a new land—a land where civilization was just overstepping the borders.

Judge Fellows, a man of fifty, was evidently one of those disappointed political lawyers who had found solace in a small community.

His nose bespoke a convivial acquaintance with red liquor; his jowls set heavily on his neck; his mustache and hair were unkempt beyond words; his vest, which buttoned sparsely over a protruding stomach, was stained with the liquor which failed to find its way down his throat; his collar was evidently being worn on a bet—in short, he was the most uninviting personality I had seen in many moons.

When he spoke, his voice was thick and rasping, as is the voice of the man who has fed himself on liquor until his vocal cords are strings.

My arrival in his court-room was a sensation in which all but he took part.

He hardly looked at me, but the sinister shudder that ran through the room when I took my seat beside my attorney, Mr. Blenheimer, assured me that I was none too popular.

Right then and there, I realized that I would get the worst of the deal.

It took some moments to get down to business, because the clerk of the court could not be found.

It didn't seem possible that he would absent himself on so important a morning, and when Judge Fellows's patience had about spent itself, he angrily ordered the sheriff to hunt the young man up and order him to appear under threat of a heavy penalty for contempt.

It was not necessary to carry out the order, for the clerk entered just then. He, too, was exhibiting the outcome of a night muchly occupied in "hoistin' 'em."

He apologized to the judge, gave him a look which both understood, and then proceeded to read the indictment against me.

Judge Fellows announced that owing to the amount of work ahead of him and the crowded condition of the present calendar, he wanted my case disposed of without delay.

He would brook no "juggling for a jury," as he termed it, and hoped that the prosecuting attorney had his case well in hand.

That worthy nodded assent—but nothing was said to my lawyer regarding the possibility of our side not being ready to proceed.

The selection of the twelve men to sit in judgment on my future was so laughable that even I—the prisoner at the bar—could not help smiling as they were brought up to the witness stand, asked a few conventional questions, and pointed to their places in the box.

Only two were excused—one because a blast in a mine had rendered him partly deaf; the other because he had an engagement with a dentist.

The remaining dozen all asked to be let go for a variety of causes ranging from death to disaster. One informed the judge that his wife told him that she would beat him if he went on the jury, whereupon "his honor" replied that he would insist on the talesman serving just so he would be certain of the proffered chastisement.

Pink Dayton was the principal witness. Under the guidance of the prosecuting officer, he told the wildest tissue of lies that ever went on record.

The judge permitted him to pile falsehood upon falsehood without permitting my side a chance for reasonable doubt

Whenever Mr. Blenheimer would attempt an objection, the judge would disregard him.

Once I turned to the jury in the mad hope that I could telegraph to them the assurance of my innocence, but their eyes were on the lying witness and the unfair judge—not on me.

The burden of Mr. Pink Dayton's testimony was that he knew of the many depredations that had been made against the E. and W. M. L., and as an employee of that company and a law-abiding citizen of the State, he deemed it his duty to take drastic measures to apprehend the culprits.

He knew that men had been sent to Grant Junction in the guise of tramps to beg for work, and, when employed, they merely used their position to learn some inside information regarding the railroad or await a chance to damage its property.

When he learned that Pete Gleaner had

put me to work to assist in unloading the car of dynamite, he felt certain that I was not to be trusted.

"What was there about this man's appearance that made you assume such an opinion?" asked my lawyer.

"He was a tramp," responded Dayton.

"You claim, then, that because a man is a tramp, he must of necessity be dishonest?"

Before the witness had time to reply, Judge Fellows interposed with:

"This is not a debate on tramps. Go on with the direct examination, Mr. Prosecutor."

Pink Dayton told the judge and jury that he had suggested to Pete Gleaner that I be put on watch that night so that his suspicions regarding tramps in general, and myself in particular, might be brought to a head.

He swore that he had taken the accommodation from Grant Junction to Doran's Corners, hurried home for dinner, and then had returned to the junction on horseback in order to spy on me and get the evidence first hand.

"In order not to be detected," he continued, "I hitched my horse to a tree not far from Tower DC, and proceeded the rest of the way on foot.

"When I reached the car on the siding at Grant Junction, this prisoner was not at the post to which Pete Gleaner had assigned him. There was no one near the car.

"I at once surmised that he was somewhere in the neighborhood doing some damage. I thought that he might be setting fire to the bridge. I was about to run down to the tower to tell the man there to block all traffic when I saw the flames leaping up some distance across the tracks. When I reached the conflagration, this prisoner was in the act of running away.

"Gleaner was lying on the ground in full view of the prisoner and myself. I leaned over Gleaner, as I thought that he was merely stunned and would soon be able to get up and help me, but I saw that he was in a bad way. He just whispered something that sounded like murder, and then he was all down and out. This fellow Williams and Gleaner's daughter got suddenly gone on each other, else why has she run away and left her mother to care for her poor dying father?"

I had been making notes in order to assist Mr. Blenheimer to break up this damnable story when he should take the witness in hand for cross-examination.

Pink Dayton's final words, however, were more than I could stand.

To have hurled his lying testimony in my teeth was something that I could battle with and ultimately answer for, but when he lied so fiendishly, he uncorked the pent-up fires of my wrath.

Ere judge or jury or lawyers could stop me, I was on my feet.

"Liar! Liar! You liar!" I shouted, pointing my finger at him. "Judge," I cried, appealing with all the emotion in my heart to the whisky-bloated, sodden individual who sat on the bench, "in the name of God and humanity and the law—don't let that man go on! Every word he has uttered is a lie—a lie!"

My only reward for this outbreak was to get the worst of it. I resisted my lawyer's effort to pull me into my seat, I turned in mad appeal to the jury, I struggled inwardly, but the tears would flow.

"Gleaner will brand this testimony a lie!" I went on.

The sheriff made his way through the surging crowd to my side, and, gripping me by the shoulders, forced me into my chair.

Mr. Blenheimer immediately began to argue with me against the propriety of indulging in such conduct.

The judge rapped for order, and I was told by him that another exhibition would result in my being cited for contempt.

Mr. Blenheimer very kindly arose and muttered some words of apology for me. I might have spoken them myself, but I was far too angry.

Pink Dayton having finished his lying testimony, I was placed on the stand. I had thought that some of his crowd of associates would be asked to take the stand to back up his word, but for some reason or other—whether at his suggestion or that of the prosecuting officer, I do not know—he was the only witness called by the prosecution.

Maybe the others were being held in abeyance should my testimony prove too damaging.

I appealed to the court that I should be granted a continuance until Peter Gleaner should have sufficiently recovered to be called as a witness.

Mr. Blenheimer did not make this point particularly strong — in fact, all through the morning it seemed to me that he lacked

the force necessary to defend a man in my predicament — and Judge Fellows did not take kindly to a delay.

He was sufficiently merciful, however, to adjourn court until word could be received from the doctor attending Gleaner as to the possible time that would elapse before he would return to reason.

Even were this report favorable, thought I, wouldn't these human vampires do their utmost to break down what he might say in my favor and try to prove that the accident and its consequences had left a taint in his mind that rendered his sworn testimony unworthy of the proper consideration of a jury?

CHAPTER X.

The Verdict Is Rendered.

THE report of the medical man brought twofold sorrow to my heart. Not only was Pete Gleaner's mind still a blank, but his chance for life was so very slim that another day might end his suffering.

This was the third great weight that had been heaped on my burden. For myself, I would have gone to the gallows a brave man, regardless of the lying testimony that had sent me there, knowing that at some time in the future of my detractors they would regret their misdeeds as their consciences finally forced them to reveal the truth.

But the mysterious disappearance of Myrtle, augmented by the awful connection of her name with mine, made me wince every time I gave it a thought.

And the populace, unfortunately, seemed to take side against her as well as me, so that the comfort that the loving daughter might have established in her mother's breast was rudely shattered.

For this reason, there was no search made for Myrtle. In the mind of Doran's Corners and Grant Junction a wilful, guilty girl, afraid to face her accusers or stand beside the man she loved, had knowingly disappeared, leaving a heartbroken mother to care for a dying father.

But I knew different.

I knew that she had been kidnaped! I knew that Pink Dayton was guilty of spiriting her away! I knew that she was being kept a prisoner somewhere, and that her dear heart was bleeding with anguish for her mother, and pity for her dying father! I knew that she hated and feared Pink Dayton, and I knew that Pink Dayton would leave no stone unturned until he made that little girl his slave!

The plan that he was building to bring this about was all too plain—and it was working out like a charm.

He was dealing the cards from the bottom, and each hand that he held was so certain of fulfilment that he regarded the game as a joke.

And fate stood behind him and cheered him on as he made us all look like gudgeons biting at an imitation fly.

The final weight of my burden was the unfortunate position of Mrs. Gleaner. That she regretted the unhappy day when my wandering feet found their way to Grant Junction, I did not deny.

I knew that if so kindly a soul nurtured hatred in her heart, that hatred was being poured on my head. But my pity and my prayers went out to her. With all the humanity in my nature, I felt for her in her suffering and despair, for I knew that they were deep and nerve-racking.

Sitting there at the bedside of the man to whom she had given the best in her life, not daring to leave him even for her bodily sustenance, believing that her tears and her nursing would bring him back to her, looking into his roaming eyes for one little glance of recognition, and hoping, ever hoping, that God would take care of her baby wherever she might be—was ever a woman more keenly tortured?

Judge Fellows would not give me further time.

To say that I took the stand in my own defense and denied to the last drop of power in my frame every word that Pink Dayton had uttered, would be an insult to human intelligence

But the more I gave Dayton the lie and the closer I stuck to my own recital of the truth, the further from freedom I seemed to drift.

It was as clear as the day that the word of Pink Dayton was matched against the word of John Pearton Williams, and that Williams was sure to be the one to be declared a liar.

And, when it comes to the last analysis, a court trial simply resolves itself into this: the ability of one side to prove that the other is lying.

Booted and spurred, I made a gallant attempt to establish the whole truth and

nothing but the truth. The judge called to the lawyers to sum up. Mr. Blenheimer was apathetic and hopeless, but as sincere as any man could be.

He really believed in his heart that I was innocent, but he had neither the forensic power nor the marshaled testimony to establish one per cent of that innocence. Instead, he only wasted good time.

The prosecuting attorney jumped into the breach, painted Pink as a saint, pointed to me as a thief, a murderer, and a dynamiter.

He wound up with a startling peroration in which he declared that "there was no crime that I would not commit, and that it was for the best interests of society that I be found guilty without a plea for mercy."

He went on to say that the East and West Main Line, "which had done so much to build up the community," would thank the people of the great State for making an example of me.

Without leaving its place in the box, without retiring for even a moment of consideration, the jury found me guilty.

The foreman turned to the other eleven and said something in a whisper. Then he arose to his feet and the doom that he was sealing for me was spoken before the fatal word, "guilty," was uttered.

I stood up to receive my sentence. In cold blood Judge Fellows announced that he would not be coming to Doran's Corners for some time, and so he wanted to get through with my case.

I was asked the formal question, if I had anything to say.

Accepting the inevitable as cheerfully as possible, I addressed "his honor" as follows:

"I apologize to the court for my most unseemly outbreak, and I assure the court that I am absolutely innocent of these charges—that the day will come when every person in this room will see that a terrible mistake has been made. I trust to my Maker for that!"

Mustering up more determination, I continued:

"I regard this trial as being unfair and unjust! The unsupported testimony of a desperate man has been used to convict me! Such evidence is a travesty on justice—"

"I will not permit any criticism of the proceedings of this court!" snapped Judge Fellows as he cut me short with his banging fist. "Sit down!"

After the boozy clerk had taken a record of my life I was made to stand again in order to receive sentence.

It was near train time, and "his honor," had to hurry. He pulled out his watch and glanced at it, then said:

"John Pearton Williams, you have been found guilty by a jury of your peers of destroying property and attempting murder. On the former charge you are hereby sentenced to State's prison for the term of twenty years. In the event of the death of Peter Gleaner you will be rearrested and brought here and tried on a charge of murder in the first degree. Take him away!"

The sheriff and my friend, the trusty, were already by my side. Limpingly I tried to rise. Each of them put a hand under my arms and assisted me to my feet.

For just a spell I was dazed, but I soon got back my nerve. As I was being escorted from the room I felt every eye of the surging audience which crowded the room, clogged the door and poured through the windows—I felt every eye pierce into the core of my heart.

Like a domineering jinx, Pink Dayton stepped in front of me.

Prodding his fist into my ribs, he said with a leer:

"You dirty hound, we've got you now where you can't get away!"

I did not reply to him. He was too far beneath my contempt

Though I had lost the fight, though the great elements of life that I had relied on to win for me were submerged by the unholy word of this fiend, I would show no outward sign of my terrible hatred and contempt for him.

No word would escape my lips that would tell how deeply he had thrust his poisoned dagger into my vitals.

CHAPTER XI.

Planning for the Future.

IF any man who reads this narrative thinks that I went to my cell and showed by outward and visible signs that my heart was broken, let him peruse no further, for these chronicles will have no interest for him.

Notwithstanding the overwhelming conditions that arrayed themselves against me,

I was not at all unmindful of the ultimate outcome of my most cherished hopes.

Notwithstanding the fact that I was in about as tight a hole as it was possible to be in, something in the clouded sky shone brightly; something told me that I would come out on top.

The sorrow that filled my heart was not for myself; it was all for those unto whom my unfortunate coming had been a source of remorse.

In spite of the fact that I bore the stigma of a convicted criminal, I went to my rest that night with a lighter heart than had been my wont since my incarceration.

I laid on my bunk slowly reviewing the misfortunes of my life, and it finally dawned on me that I had only myself to get me out of this predicament. The situation resolved itself into this:

Firstly—All hope to appeal my case to higher authorities must be abolished. I had no money to make an appeal. I must abide by the verdict of that jury.

Secondly—I could not do anything for myself unless I were free.

Thirdly—I could not get free unless I broke jail

Fourthly—If I broke jail, it must be before I was placed on trial again.

That night my friend, the trusty, came to my cell, and was surprised to find me in such a state of good humor. He did not expect that I would be in so talkative a mood, but there was a good deal that I wanted to find out.

We sat up late in the dim light of the corridor lamp, and I acted as a mild inquisitor on the *modus operandi* of prison life.

"Well, they put it to you good an' plenty," he said.

"They did," I replied, "and they will live to see the day when they will regret it. That fellow Dayton is some liar."

"He may be all that you say, but the jury believed him," my friend answered.

I did not want to go too deeply into that phase of the subject with him, so I took another tack.

"When do you think they will send me to the State's prison?" I asked.

"You'll be shot up there to-morrow," said he.

"About what time?" said I.

"Well," he answered, "they generally take prisoners on the one o'clock train, but I guess you'll go on the five o'clock morning train. There won't be such a crowd then."

"A crowd?" I said with astonishment.

"Yes," he explained, "a crowd. You see, you ain't none too popular with Dayton and his gang, an' that takes in nearly all of the populace. If they made up their minds to a lynchin' bee while you're being taken away, it would be all off with you."

He certainly was cool about it. One would have thought from his attitude that they were about to give a pink tea in my honor.

"Where is the State's prison?" I asked.

"At Monasyng—twenty miles north of Grant Junction."

He brought me an extra cup of hot, strong coffee, an act of kindness to be remembered, prior to my journey to Monasyng.

I feared that my nerves might get the better of me during the long night, and as I always found solace in strong coffee, I took the extra dose as a necessary sedative.

When my friend was about to leave me for the night he extended his hand, and I shook it warmly.

"I always like to say good-by when they are going away for the long spell," he said with a smile.

Again I thanked him.

"Is there anything that I can do for you before—before you leave in the morning?"

"I have but one favor," I said.

It had been piercing my mind for some time. I did not want to go away without learning something about Pete Gleaner, so I asked this man, whose heart seemed right, if there was any possible way of getting some news of my friend.

He promised that I should know before morning. While he could not leave the prison himself, he explained, he would, as a favor to me, get somebody to wire to Tower DC.

The operator there would be in touch with the most important affair in Grant Junction.

Then he left me and I went to bed.

There is not much for a man to dream of when he finds himself facing a twenty-year term in prison, with the electric chair or the gallows as a possible side issue, and not a living soul to put in a good word for him. There is not much to dream of save the horror of the barred cell and the inhumanity of paying a penalty for some crime that you did not commit.

In spite of the overdose of coffee, my great optimism, and my trust in all that is good, it was a long time before I could close my eyes and keep them closed.

The rats and vermin were more numerous and active than ever, the dim light in the corridor flickered as a beacon of despair, and the other inmates snored a requiem to my hopes.

I tossed and turned and made frequent trips to the grated door and the bucket of water outside, the contents of which I was able to bring to my parched mouth by means of a tin cup through the grating. But the more I drank the greater was my thirst.

Had it not been for Myrtle Gleaner, I believe that I would have done something to end it all.

What had I to live for save to show the world how innocent she was? What mattered my future?

I was nothing but a common tramp. My education and better breeding counted for naught in the minds of my traducers. Whenever it made itself apparent they only treated me the worse.

The uneducated look upon the educated as the real aristocrats of the world. The uneducated will grovel before the vehicle of the rich and permit it to flatten them out like a mighty pancake, but they will torture a man whose greatest power is his intellect whenever they find him in a hole.

Oh, count me a fool and say I do not know! I do! I have been taught by bitter experience. If there is class distinction in this country, the gaping chasm spells culture and learning—not wealth!

The socialist does not cry against wealth, nor does the anarchist strike at its foundations. All men look upon wealth as necessary, and the great law of progress says that one is entitled to all that he can earn. When the bitter shaft is aimed he who knows more than his fellow man is the target.

It has been so ever since the first great pioneer of civilization carried His cross to Calvary.

CHAPTER XII.

Meeting Mr. Foster.

I WAS sleeping soundly. I was dreaming of being shot by a corps of soldiers. The guns rattled and rattled again, but the bullets went wild. Finally I awoke with a sudden start

Instead of a volley of musketry, the trusty was pounding on my cell-door.

"I thought that you would never wake up," he said, as I sat up on my bunk.

I rubbed my eyes and looked at him.

"I just got word from Grant Junction," he said quickly, "Pete Gleaner died about an hour ago."

He might have been announcing the score of the ball-game, so glibly did he speak.

"Is that so—is it true?" I faltered.

"We got it direct from the Tower," he said. "It's all over town by now."

"Shut up that noise an' let us sleep," came from one of the adjoining cells.

"Well, close your traps an' go to sleep," replied the trusty, and he was off, leaving me in the most bewildering whirl of thoughts that I had ever encountered.

"Pete Gleaner dead — Pete Gleaner dead!"

I repeated the words until my sight was blurred. Then I knelt by my bunk and prayed for him. I actually prayed aloud for the repose of the soul of this good, kind friend, for whose death I was indirectly responsible, but for which the law would hold me directly responsible.

The only voice that I could call on to say one word in my favor was stilled forever; the only hand that could be raised in my defense was pulseless clay.

There was nothing left for me to do but take this unfair law into my own hands. When the morning came I would be brave and I would act—my lucky stars help me! I would act!

Regardless of the consequences, I would act! I would be free; and if it took years to do so, I would prove to the world that I was an innocent man.

I paced the cell for the rest of the night, planning and adding to my plans, building a future that was great with hope and promise; but it all rested on one desperate moment—and that moment was not far off.

The first gray streaks of the new day were visible through the grated window.

One by one the other inmates began to awake, and the rats began to vanish until the coming of another night; but I would not be there to curse them.

I knew that it would not be long before the sheriff would come for me. So far as I knew, the train that was to convey me to Monasyng left Doran's Corners a little after five o'clock.

I took a long drink of the water, then

dipped a handkerchief in the bucket and bathed my face. I had no belongings to pack up. If I had been possessed of anything, I believe that I would have left it behind, for I wanted no hindrance to the scheme that I hoped to put in operation within a few hours.

At length, my escort came. To my surprise, he was not the regular sheriff of the Doran's Corners prison, but a stranger.

He was an elderly man—something over sixty, I should say—but his broad shoulders and erect frame bespoke a goodly strength.

A sparse, closely cropped mustache covered a thin, determined mouth. Steel-gray eyes that narrowed to slits when he looked at me betokened a determined spirit. Heavy set jaws and a quick, snappy mode of elocution warned me against looking to him for anything that was outside the strictest attention to his duty.

"This him, Tom?" he called to the trusty as he stopped in front of my cell.

"That's him, Mr. Foster," replied the trusty.

In another moment the trusty came and unlocked my cell-door, and Mr. Foster entered.

"Are you ready, Williams?" he asked.

"All ready," I replied.

Mr. Foster thereupon took the shining "steel" from his pocket and snapped one end of it to my right wrist and the other end to his left.

"Come along," he commanded.

Tom, the trusty, was at the door awaiting us. As we passed out he said a kindly good-by.

It was good to breathe the crisp, fresh air of the outer world, and I inhaled it deep into my lungs.

Notwithstanding the fact that the hour was unusual, the streets leading to the railway station were crowded with an uneasy humanity. Men surged close to us, and I again heard my name spoken in terms that were not pleasant. The buzz of lynch law was in the air.

"Keep close to me," said Mr. Foster. "Do not look up. Keep your eyes on the ground and keep step with me."

There was determination in his voice that brooked of no opposition. I did as he ordered.

I soon noticed that he drew his pistol with his right hand.

As the crowd drew in closer he raised it and deliberately cocked it.

"The first man that interferes will get this, and get it straight," he called out

"Pete Gleaner's murderer! String him up!"

The cry came loud and clear—but only once

Mr. Foster evidently had that crowd in check.

He stopped and raised the revolver and looked defiance. The surging mob slunk back.

We stopped again, and a rotten tomato hurtled from the outskirts of the crowd and caught me square in the face. It was a well-aimed throw. Christy Mathewson couldn't have done better.

I swallowed my pride and said nothing I showed no signs of anger.

Another very ripe tomato, and then another—and still another. Then came a volley. They were all soft and juicy. One out of every four struck me, a few struck Mr. Foster, others squashed about us on the pavement.

There was nothing to do but meet the fusillade calmly. It was plainly evident that Mr. Foster would raise no objection to this sort of amusement.

The train for Monasyng was waiting for us to get aboard before it pulled out.

Mr. Foster was just a few moments late, a purposeful delay because he wanted the train to start immediately we got aboard. We marched to a baggage-car next the locomotive. As there were no end steps, a freight-truck was pushed alongside, and Mr. Foster and I entered by the side door.

One-half of the car was filled with an assortment of express packages; the other half was quite empty, except for an International Express Company's chest.

Mr. Foster led me to this chest, unclasped the "steel," and gruffly told me to sit down.

No Sunday-school lamb ever obeyed more meekly; no man convicted of a crime ever looked more like a Sunday-school lamb than I did just then.

Mr. Foster slipped the revolver into the right-hand outer pocket of his coat, and then stepped to the door and closed it. In the mean time, the train had found its momentum.

We were alone. I kept my seat, and my custodian started on a measured walk between the pile of express packages at one end and the chest on which I was sitting at the other.

Once—nay, twice—I asked him a civil

question, but he did not answer. I read in his cruel face that he did not want to talk to me, so I kept my peace.

After journeying for half an hour, we came to a halt. We must have been at this station loading and unloading for nearly ten minutes, when Mr. Foster opened the door and looked out. He called to the conductor.

"Going to take anything out of this car before we get to Monasyng?" he asked.

"No," replied the con, "that car goes through to Mayville for the main line."

It was evident that we were not to be molested.

When we pulled out again it was apparent to Mr. Foster that his prisoner was asleep.

I had pulled my hat over my eyes and had fallen into what seemed to be a gentle doze, which was made more realistic by a well-modulated snore.

In reality, I was as wide awake as a desperate man could be. I was watching Mr. Foster much more keenly than he was watching me.

I was waiting for the moment when I could lay my hands on his throat and choke him into insensibility. But I wanted to be sure—oh, so very sure! It would not do to make a mistake. The clinch was about to come. I *must* win!

He kept up his incessant pacing to and fro. Now and then he would stop and lean against the side of the car, but always with his face toward me. Without opening my eyes, I knew that he was looking at me, and then I snored all the more and gave other evidence of feigning sleep.

If he had only halted with his back to me!

He went to the door. I heard it slide back. I realized that the bright sunlight was streaming in. I peered through my half-closed lids and saw Mr. Foster catch hold of the hand-bar above the door and look out admiringly.

No; he was in a poor position still. His side was toward me. The advantage was still in his favor.

If the crafty old man would only turn his back!

The measured puffing of the engine told me that we were on a grade. I should judge that we were going at the rate of about twenty-five miles an hour.

I looked cautiously for something with which I could attack him. There was absolutely nothing in sight sufficiently powerful for an assault. After all, I would be obliged to rely on my hands to strangle him to a finish, and then make my escape by jumping from the car.

With a suddenness that was startling, I changed my mind.

The peculiar rumbling of the train told me that we were on a bridge. The sound grew more and more evident.

Now I would make my break for liberty.

Treading with the softness of a cat, I made for the door.

Even if I had lost my life in the attempt, I could not turn back.

Before Mr. Foster was aware, and quicker by a hundred per cent than I can pen these lines, I made straight for the door and plunged into the river below.

Fortunately for me, the train was running on a single track, and there were no protruding obstacles to break my dive. Just what flashed through the mind of Mr. Foster at the moment—just what he said or did—I do not know, but I fully expected that my life would pay the penalty for my foolhardiness.

Mr. Foster fired as I plunged.

The reckless do their best in the midst of their recklessness. I made a perfect dive. His bullet found its mark in the heel of my left foot. I felt the impact as I was going down.

He had made a good but an ineffective shot. I felt the sting, too, as it jarred my heel.

He fired again, but the bullet went wide. This time I heard it whiz by my head, and knew that I was safe.

Then I struck the water. Although it was icy, bitter cold, it penetrated my marrow like a red-hot poker.

Once under, I struck out, doing my best to keep beneath the surface. A terrific current was carrying me along. It was the source of least resistance, so I went along with it.

Finally, I could not stand the buzzing noise of the rushing water in my ears, so I came to the surface.

I was none too good a swimmer, and I was thankful indeed for the strong current.

When I had shaken the water out of my eyes and ears and looked around I saw—thank Heaven—that I was being carried away from the train.

But when I rose to the surface, gasping for breath, I realized that I had been under

water a longer time than I imagined. I also saw that I was further down-stream and nearer safety.

The train had come to a stop. Mr. Foster, evidently the only man aboard with a weapon, had saved his ammunition until I came to the surface, and I saw him take aim and fire.

A shining bit of metal struck the water near me, flattened perceptibly, and oscillated downward.

I saw him aim again. I saw the train-crew lined up on the bridge. I heard them shout for me to return—the fools! I heard the engine whistle vigorously — for some reason or other. I saw the shack, with his little flag, run ahead on the ties.

All this I saw over my shoulder as I swam along vigorously with the current. My brain was quite as energetic as my arms and legs. Having the vantage of safety, I could think rapidly.

There were only four more pellets in Mr. Foster's gun, I estimated, and I actually smiled to think how he would feel when the last was discharged.

Again he fired. He seemed to be taking better aim; and as the smoke flashed from his barrel, I dived under.

It was truly remarkable to see that bullet flatten as it struck the water, deflect in its course, and fall to the bottom—a harmless thing.

Again I came to the surface, and again Mr. Foster fired. Again I dived, but this time his bullet must have gone far from me, for I did not even hear it splash.

At length he ceased firing. Still standing in the door of the car, he waved his arms and shouted to me.

Notwithstanding the weight of my clothes, I was not fatigued. I lent myself to the current, and with but little effort to keep in its middle I was—

Suddenly I found myself being whirled round and round. I was like unto a spinning top. The trees on the banks gyrated in a drunken circle. All that I could do was to give myself up to the eddying river and trust to luck

It gripped me with terrific force, now sucking me under, now hurtling me forward.

Every stroke that I made with my arms was as useless as I were wafting the air. I seemed to be drowning one moment, and the next I was almost half out of the water.

Finally I was thrown into a calmer part of the river. Buckling what strength remained in me, I made for the shore. As I was swimming to the bank, I looked in the direction of the bridge—and the train was gone.

CHAPTER XIII.

A Fresh Start.

WHEREVER on the face of the earth I happened to be, the surrounding country was a wilderness—a wilderness of trees and other foliage and dense undergrowth.

The river flowed between what seemed to be a range of mountains; and through an opening in front of me I could see a level stretch which looked as if it were under cultivation.

The bit of bank on which I had found refuge was about a quarter of a mile in length, running abruptly on both sides to vertical, stony cliffs.

The sun was shining full upon me, and so it seemed to me that I must be on either the south or west bank of the river. To my keen delight, it shone unusually warm; and, feeling a sense of safety, I divested myself of my clothing and hung it in the neighboring branches to dry.

I assisted in this process by wringing out as much of the water as possible; but with every wrench of the cloth, and with every step I took, I stopped and listened intently.

At every other breath I would scan the river for fear of an approaching boatman, or preen my ears for the baying of the bloodhounds which sooner or later would be on my track. I would have given half of my life just then if by some means I could have followed Mr. Foster.

I went into the shade of the trees and waited in silence. I must have waited for almost four or five hours—for the sun was very high in the heavens — when I heard, distinct and clear, the measured click of an oar-lock, and I knew that a boat was coming in my direction.

I grabbed my clothes from the tree. They were not quite dry, but I put them on. Cautiously I peered from my hiding-place, and saw a man rowing a boat in the direction from which I had come.

He was pulling along leisurely. He wore a big-brimmed hat, and a long fishing-pole protruded from the stern of his craft.

He may be out fishing, said I, or he may be in deep disguise.

However, he dropped anchor about mid stream and cast his line, settling down for a bite with the patience that is the angler's most winning charm.

Now, said I to myself, if this fellow is a disciple of Ike Walton or a man-hunter, I will soon know. If he is hunting me, he will stay but a limited period in one place; if he is really out for a scuttle of minnows, he will not desert his post until he is certain that the fish won't bite.

I will give him thirty minutes in which to prove if he is one or the other. At the end of that time, if he still be angling, then he and I will be on speaking terms.

I had no means of estimating the time save by guesswork.

I would wait until a certain peak cast a shadow in my direction, then I would call to him and ask to be conveyed out of my predicament.

Toward the end of my vigil I became a bit impatient. It seemed that I was about to face the muzzle of some sheriff's gun or be forced to a tree by the hounds. I could stand it no longer, so I stepped boldly out to the open and shouted a long "Hallo-o-o!"

The angler turned sharply. He looked at me, and I yelled again, beckoning him to come nearer. Using his hands as a megaphone, he shouted: "What do you want?"

"How much to take me across the river?" I shouted back.

He pulled in his line and turned the boat in my direction. As he rowed in toward the bank I could see that he was a very young man with a face that betokened kindness.

"Where do you want to go to?" he asked.

"I want to get across the river so that I can get onto some road," I replied. "I haven't much money, but I'll pay you for your trouble."

"I'll take you across without pay," he said, and I inwardly thanked him for relieving me from further exemplification of my bluff

"How on earth did you get there?" he asked.

"Just the mistake that a wanderer will sometimes make," I answered. "I am one of the great unwashed—I've been a bo for years — perfectly harmless. Last night I wandered down here in search of water and lost my way. Slipped and fell, and got a good ducking in the bargain. But my clothes are pretty dry now."

"Jump in," he said, as he pushed the nose of the boat into the shore. I gave it a lusty shove into deep water and did as he ordered.

"Do you have far to go?" I asked.

"It's a pretty good mile to the bend. After you get there you can follow a cow-trail across my farm. That will take you to the county road leading to Doran's Corners one way, or Mayville in the other."

"Better let me do the rowing," I said. "I am handy with the oars, and it will help to pay you for your kindness."

He demurred, but I insisted. Finally I persuaded him to change places with me, and I went to the oars with a will. I felt better, anyhow, at being the motive-power of the craft, for I would row faster than he, and I wanted to put distance between me and the immediate neighborhood at any cost.

As I pulled along he chatted nimbly about his bad luck at fishing that day, saying that he did not get a bite during the entire morning, and was about to start for home when I hailed him.

I talked both glibly and philosophically about fishing as a pastime while he directed me, now to port and now to starboard, until his landing-place hove in sight.

I sprang to the shore and thanked him, asking to be directed to the cow-path.

"Better come to the house, and have a cup of coffee and a bit to eat before you start out," he said.

Without losing any of my nerve, still feeling that I might be plunging into the jaws of death, I accepted his invitation. I followed him to his home—a cleanly mite of a house on the slope toward the river.

His wife, a hard-working woman, was not too glad to see me, and reluctantly placed the viands on the table.

I ate; but I was not worrying about hunger then. What I wanted was to learn from him the lay of the land.

I assumed a deep interest in the surrounding country, and told him that its beauty had appealed to my most artistic sense as I wandered through it.

"We hoboes are a queer lot," quoth I. "We wander here and there, meaning no man harm, enjoying life and hoping that we will not stumble across any work."

Here I laughed heartily, and mine host, thinking that I was but a good-natured vag, pushed the coffee-pot in my direction,

and helped me to another slab of his good wife's most excellent apple-pie.

CHAPTER XIV.

A Night on the River.

MY farmer friend was so interested in the story of my alleged wanderings that he invited me to spend the night at his place.

I told him that I preferred to go on to Mayville, where I would board the express east that stopped there at midnight.

It was then early in the afternoon, and I had some time to kill before darkness set in.

I informed him that I preferred continuing my journey, and as he insisted that I take something to remember our meeting, I settled on a change of underclothes and an old suit that he had discarded, but which was so much better, and so very unlike the suit that I was wearing that I was glad of the opportunity to make a change.

He wanted me to take a new pair of shoes—but at this I hedged.

I was not anxious to reveal the bullet in the left heel.

He quietly insisted, but I had a good excuse. I told him that a man who spent his life walking got accustomed to his shoes and hated to discard them until they were actually worn to paper.

Then I left him. He took me to the back of the house and pointed out the cow-path.

He told me to follow that path for about a mile over the hills, when I would come to the county road.

By following that road for about ten miles I would reach Mayville. I thanked him and departed.

I kept on the cow-path until I was well out of sight of the house. The trees about the path were small and thick of growth, and just to my liking.

I stepped to one side into a particularly deep clump, and there I stayed, listening, ever listening until darkness set in.

By a circuitous route, I then found my way back to his homestead, and silently skirted the tree growth that surrounded it until I was alongside his boat.

It was much better for me to travel by water than by land. It would be easier to baffle the bloodhounds if they were on my trail.

I pushed off without losing a moment. The route that I intended to take was up the river to the bridge where I had made my escape

There I would set the boat adrift and follow the rails to Mayville. The tie-walking was much easier, and the distance by rail was shorter than by the county road.

I fully reckoned that I was strong enough to pull the boat through that whirlpool and against the current; but I reckoned wrong

I could no more breast that current than I could fly. Once in it, my boat was more at its mercy than my body had been earlier in the day.

Struggle as I could, I could make no headway. I moved every muscle to master it, but it was only with the most herculean efforts that I managed to get into easy water again.

Then I heard them coming!

From a distant crevice in the hills came the long, low baying of the hounds!

I knew it! I had heard it once when a very small boy when they were tracking a desperado over the hills of my Connecticut home.

I recalled how that sound thrilled my being with horror, and how deeply I felt for the poor wretch who was being tracked. I pictured him being torn to pieces as the dogs set upon him.

Little did I dream that I would one day be the man who was being run to earth in the same manner!

Yes, they were coming!

The howling grew more distinct, and then it died away.

Now the dogs seemed to be coming closer; now they seemed to have lost the scent and were going in another direction.

Then there would be long stretches of silence—and these troubled me the most, for the next moment I expected to hear the dogs at the banks on either side of me.

I had pulled to where the water was more calm—a large indentation in the river breaking the force of the current.

It was dark, but by the starlight I could outline the shore on either side of me.

At first, I thought that I was a fool not to have kept to the cow-path and the county road; again I realized that I was safer in the middle of the river.

If I had known the slightest of my surroundings, all would have been easy.

When one is a hunted being he thinks of things that would immortalize a man in

ordinary life. His sense of fear is blunted. Courage comes to the pursued in its best form when he is in the tightest places. It is his head against everything, and he knows that if he is finally run to earth, he has at least made a gallant fight for his freedom.

A score of schemes crowded my mind. I resolved to try the simplest, for it appeared to be the best.

That was to row on down the river past the farmer's home, and then to keep on and on, and trust to luck.

If I stayed in the center of the river the dogs would have less chance, and it could not be possible that the men were with them.

I calculated that, owing to the wildness of the country, the dogs had been turned loose, and that the men were following them as well as possible, but were waiting for their familiar cry when the quarry is run to earth.

On and on I pulled. By taking the oars from the locks, I managed to make but little noise as I rowed along.

I was careful to dip them easily in the water, but each stroke was long, and there was muscle back of it.

Nearer and nearer came the baying.

Great Scott! the hounds had been sent down both sides of the river!

Their wailing cry was now as distinct as if it were but a mile away.

I rested on my oars and let the boat drift. I imagined that I could hear the panting of the dogs on the shore to my right. I was sure of it! I was sure that I could hear them dashing through the underbrush over dry leaves, scurrying hither and yon.

I was not mistaken. The dogs had finally located me. They were on either side of the bank, yelping like demons.

I could now see their bodies outlined against the more open spaces as they dashed to and fro—but there was nothing like the sound of a human voice!

I could not be caught like a rat in a trap. Likely as not the posse now realized from the cry of the dogs that their man had been located.

Splash! One of the dogs had plunged into the water and swimming toward the boat. Then another followed, and still another.

There must have been eight in both packs, and I surmised that half of them were now in the water and the rest were still on the river-banks.

They seemed to have the instinct to divide their work

Realizing that the dogs were making for me, I again bent to the oars.

By straining every muscle, I kept a good lead, but I was getting winded and muscle-sore and was not making such good headway. I noticed that the dogs in the water either did not or could not yelp—that part of the proceedings being kept up by those on the land.

One, more agile than the rest, came close to the boat. He had a good lead on the others.

I could plainly see his head above the water. He was almost abreast of me.

I pulled one oar into the boat and waited until he came almost alongside.

His nose was almost within three feet of the boat when I raised the other oar and brought its sharp end clean on the middle of his forehead.

Somewhat exhausted by his long swim, he made no resistance, but went to the bottom like a log.

It was now an easy matter to settle the fate of the others in the water, provided they got within striking distance, as this first one had done; but I deemed it unwise to drift around and await their approach, so I again buckled to the oars.

The long night was before me, and the stars were now shining wondrous bright. It was easy to see my way. So on I pulled.

With every swing of my arms the boat shot forward. I was keeping well in the center of the river, and it was plain to see the hounds swimming after me in single file. Those on the banks had suddenly become quiet.

(To be continued.)

A switch-lever is like a good resolution—properly operated it usually points things in the right direction.

MAIN LINE MATTERS

Three Big Canadian Railways Spending $45,000,000 for Extension Work.

The Baltimore and Ohio's Educational System—High Speed Made by "Preference Freight"—Robert E. Strahorn's Rise—Promising Coal Economizer.

BY NEIL BRAMSTEAD.

WESTERN CANADA RAILWAY WORK.

The C. P., the C. N., and the G. T. Are Expending $45,000,000 and Employing 30,000 Men.

IT is estimated that railway improvement in western Canada is involving the expenditure of $45,000,000 and the continuous employment of 30,000 men and 10,000 teams, and that the accomplishment will be the construction of 2,800 miles of new track.

At an early date two more railways will reach the Pacific coast in Canada—the Canadian Northern and the Grand Trunk Pacific. The former, which is following a route said to have been the original proposed location of the Canadian Pacific Railway, will terminate at Vancouver; the latter will reach the Pacific at Prince Rupert, about 450 miles north of Vancouver

Besides these extensions westward, the northward ramifications of the railway system include a line to Port Nelson in Hudson Bay; two converging branches from North Battleford and Edmonton, meeting at Athabasca Landing, and a line running close to the Peace River country.

In Ontario there are to be constructed branches of important size entering the Thunder Bay - Algoma district. Through southern Manitoba the Great Northern Railway will enter Winnipeg.

The three railways now traversing western Canada—the Canadian Northern, Canadian Pacific, and Grand Trunk Pacific—are competing with each other in extension work. The Canadian Pacific—the oldest of the three railroads, which already crosses Canada from coast to coast—is devoting its attention to double-tracking its system.

The C. N.'s New Work.

The Canadian Northern now operates a total of 5,471 miles over the whole system, while 4,120 miles of this is laid in western Canada. The company is spending $14,000,000 in construction work this year, laying 1,000 miles of new track and employing about 12,000 men.

About 150 miles of new track were completed this summer by the Canadian Northern in the province of Manitoba, including a line running up into a new territory between Lake Winnipeg and Lake Manitoba.

In Saskatchewan the Canadian Northern

is building 300 miles of new railroad, employing 2,500 men and 500 teams. One of the most important of the new lines now under construction in that province is the Maryfield extension to be carried through the coal-fields to Lethbridge, Alberta.

Another branch of considerable importance is the Jack Fish line, which is being constructed from North Battleford into the Peace River country, and has eighteen miles of steel already laid and another forty miles graded.

Most notable of all is the Hudson Bay line of some 450 miles, running from Le Pas to Port Nelson, which is being constructed by the government of Canada, and will be operated, it is thought, by the Canadian Northern. At present the contractors are busy on the bridge that is to span the Big Saskatchewan River.

In the Alberta Country.

In Alberta the Canadian Northern will build 450 miles of line. On the Vegreville-Calgary line the track has been laid to a point about fourteen miles beyond Red Deer River, while the grade has been completed to within sight of Calgary. This line, when finished, will make in all 200 miles of steel to be taken over by the company for operation.

Grading has been completed on the line to Athabasca Landing, and the company is already laying steel. The most important work being done in the province is that on the main line, which has been graded as far as the Pembina River. On the Canadian Northern line to Peace River 100 miles are about completed.

In British Columbia the work is confined to the main line, which is being constructed from Vancouver eastward to the Rockies.

The work in Ontario includes many minor improvements in the Thunder Bay-Algoma district.

Grand Trunk Is Busy.

The Grand Trunk Pacific is spending $17,000,000 in constructing some thousand miles of new track. It is stated that 10,000 men and 4,000 teams have been engaged.

There is keen competition between the Grand Trunk Pacific and the Canadian Northern as to which will first reach the Pacific coast.

Up to autumn the grade on the main line had been carried to Tête Jaune Cache, a point about 1,100 miles west of Winnipeg, while steel has been laid as far as Fiddle Creek, about eighty miles east of Tête Jaune Cache.

One of the most important branch lines which the company has under construction is that running fifty miles north from Big Gap to Calgary, where steel will shortly be laid. This branch will probably intersect the Edmonton-Calgary line a few miles north of the latter point. When completed it will offer the most direct route between Winnipeg and Calgary. The richest territory tapped by the Grand Trunk Pacific is said to be traversed by the branch running southwest from Dandurand, a point a few miles west of Edson, and entering down in the Brazeau fields, so as to serve the Pacific Pass Coal Company. It is estimated that there are 400,000,000 tons of coal available in this district.

To the Peace River Country.

The Grand Trunk Pacific also contemplates a line into the Peace River country.

From Regina to the international boundary a 100-mile line is being constructed. In the mountain section a regular service has been inaugurated to Vanarsdol, 100 miles east of Prince Rupert. The grade is well advanced for 140 miles farther eastward, and the company is operating trains as far east as Aldermere. The gap of 410 miles between Aldermere and Tête Jaune Cache, the link which will make the road complete to the coast, is soon to be started. It is expected that the line will be completed by the end of 1913.

An agreement was approved by the Prince Rupert city council under which the company was to give the city 100 feet of waterfront and certain areas for park and cemetery purposes; build a dry-dock to cost $2,500,000; build a station and other terminal buildings to cost $1,000,000, and a hotel to cost a similar amount, in return for a fixed payment of $15,000 a year as to taxes for ten years.

The board of railway commissioners has authorized the company to open for traffic its line from Prince Rupert easterly for 100 miles, the speed of the trains to be limited to twelve miles an hour.

A contract has been let for the construction of a concrete wharf and warehouse at

Vancouver for the company's steamship business, and plans are under consideration for the building of a similar wharf and warehouse at Victoria.

C. P.'s Increase.

It was officially stated recently that the Canadian Pacific Railway had 10,758.8 miles of track now, as against 10,270.6 miles in 1910. To this there is to be added 1,023 miles over the whole system, of which 897 miles are being built in single track.

It is estimated that the company intends to spend in the neighborhood of $12,000,000 in improvements and the construction of new lines in western Canada. A contract has been let for the erection of a station building in Regina, which is to be used jointly by the Canadian Northern, under the terms of an agreement between the two railways. The building will be completed May 1, 1912.

The proposal to build car and other repair shops at some point in Alberta is under consideration.

The new lines also include another branch for Lethbridge, Alberta; a line from Bassano to Langdon, Alberta, into Calgary, looping the irrigation block and a branch from a point forty miles north of Taber. It is proposed to build a new station at Calgary, a new wharf on the Fraser River at New Westminster, and a station and yard at Vancouver containing 180 miles of side tracks.

B. & O. AS A TEACHER.

Splendid Work Being Done To Help Workmen To Get an Education.

WELFARE work of improving the conditions of railroad employees is being extensively engaged in by various systems throughout the country, as has been frequently described in the RAILROAD MAN'S MAGAZINE.

The work of the Baltimore and Ohio Railroad in its Mount Clare shops at Baltimore, in providing an educational system for the employees speaking foreign languages, is regarded as one of the most progressive measures yet undertaken.

The railroad has fitted up an instruction-car in the yards at Mount Clare, where three days a week instruction is given the men during the noon-hour in acquainting them with the English language.

A large amount of certain classes of railroad labor is performed by men of foreign birth, and the Baltimore and Ohio believes that by extending to these men the means of acquiring a knowledge of English and an elementary education they become more worthy of the American citizenship to which they aspire, are quicker to improve their social conditions, and are better equipped to earn a livelihood.

In the work of instructing its employees the Baltimore and Ohio has procured the assistance of the Young Men's Christian Association and placed the classes under the direction of Secretary Colin T. Holm, of the West Baltimore branch. Secretary Holm, in order to come in actual contact with the men of foreign birth, is a regular teacher of the classes and is enthusiastic over the accomplishments of his students.

The Roberts system of teaching languages is followed, this being very easy for the men to grasp and enabling one teacher to instruct an unlimited number of nationalities in a single class. The simple, everyday affairs of life are taught the men, the things the foreigner needs to know about his home, his work and commercial life.

Some of the Subjects.

A few of the subjects embraced in the course are "getting up in the morning," "lighting the fire," "use of table utensils," "eating meals," "the man washing," "welcoming a visitor," "beginning the day's work," "the railroad laborer at work," "a man seeking employment," "letter-writing," "going to the railway station," "home expense," "depositing money in the bank," "purchasing property," and various other pursuits of the head of the family, these subjects being imparted to the employee by means of object-lessons and through the sense of hearing, just as a child learns to repeat words from hearing others.

The foreign-speaking men are drilled in the use of simple sentences, which are dramatized by the teacher acting out the meaning, and the student thus acquires a knowledge of the use of sentences rather than of single words.

After each lesson the student is given a lesson-sheet with the sentences printed thereon, so that he may practise at home and teach his wife and children, if he be so

fortunate as to have his family in this country.

On the reverse side of the lesson-sheet the same sentences are in script, which serves the purpose of a copy-book. By purchasing pen and ink, writing can be practised at home. In this way the student is encouraged to utilize every spare moment for self-improvement.

Two nights a week the men assemble in the class-rooms of the Young Men's Christian Association, where the courses are enlarged upon. In the night class the railroad employees are instructed in the laws, Constitution, and history of the country and the sacredness of American citizenship.

A trade school has also been established by the Young Men's Christian Association in cooperation with the Baltimore and Ohio to provide supplementary technical education for apprentices and others working in the shops.

Any employee of the Baltimore and Ohio may here begin his elementary education during evening hours, and thus place himself in position to specialize along mechanical lines.

The apprentices of these classes are addressed from time to time by public men and others on general topics of an educational nature. The technical classes are taught by college-trained experts as well as practical workmen, the instruction being entirely individual.

The teachers are thoroughly familiar with locomotive and car construction and designing. A majority of the machinist apprentices of the Baltimore and Ohio shops in Baltimore are enrolled as students in the technical classes, and, in addition to locomotive and car work, they are instructed in shop mathematics and elementary and advanced mechanical drawing. The entire instruction embraces a four-year course. In the last year machine-designing was taught direct from models.

PREFERENCE FREIGHT.

Fast Schedules That Are Maintained To Carry Perishable and Costly Merchandise.

A CONSIGNMENT of silk valued at $140,000 recently arrived at New York City from a Chinese port. It was received at its destination seventeen days after the steamer which carried it over the first part of the route left her dock on the other side of the Pacific. The last stage of the journey was made over the Pennsylvania Railroad system, the two car-loads of precious cloth leaving Chicago in the morning and arriving in Jersey City the next evening.

A few years past, seventeen days would have been good time for the trip across the United States. For some classes of freight it is good time now. The perfection of what is known as the "preference-freight" service has made rapid movements of this kind possible. Instead of tying up $140,000 for several months, as would have been necessary formerly, the importer was able to put his capital into action after two weeks and a half.

How much more capital is freed for investment by rapid freight!

Silks may not be a necessity, and saving on them may aid those who can most afford to pay, but how about vegetables and fruits? It touches the mass of people pretty closely to be able to get new potatoes in February instead of waiting till late spring or summer.

First Fast-Freight.

The districts surrounding our large cities do not produce enough fruit to supply them, but fast freight makes it possible for a train-load of peaches to leave the Delaware-Maryland-Virginia peninsula in the early morning and be sold in New York on the same day. This perfection was brought about by improvements in every department of the railroad organization; by more tracks, more powerful locomotives, larger and heavier cars, gentler grades and fewer curves, and perhaps most of all by the advance in operating methods.

The pioneer fast-freight organization of America was the Star Union Line, which carries on the through traffic over the Pennsylvania system between the eastern and western lines. For ten years prior to 1873, when it was purchased by the Pennsylvania, it was operated as a private line, having grown out of the business established seventy years ago by Leech & Co., of Philadelphia, and Clark & Co., of Pittsburgh.

On the west-bound schedule of this line there are eleven trains which leave eastern points daily just as regularly as do the passenger-trains, and east-bound there is only one less. This does not represent the total

volume of traffic, however, for only the last sections are scheduled, and advance sections are required so frequently that they are rather the rule than the exception during certain seasons.

Not more than thirty cars of preference freight are allowed to an engine, and thus it often takes several trains to carry the day's business from one station.

Freight must be kept moving, so a train is sent out an hour after the regular starting time if there is a large enough accumulation to warrant it; but this is called the advance section of the train, which is due to leave the following day.

Freight from New York, Philadelphia, Baltimore, and places similarly located is delivered in from one to three days, according to the zone for which it is destined. In the zone which is one day from New York are Harrisburg, Lancaster, Williamsport, Baltimore, Norfolk, Washington, *et cetera.*

Cities like Pittsburgh, Cleveland, Wheeling, Erie, and Buffalo are reached the second day after shipment, while Chicago, St. Louis, Peoria, Columbus, Dayton, and Cincinnati are in the three-day district. From other shipping-points in either the East or West an equally rapid service is given, the zones being divided according to the distance.

On West Runs.

On westward runs the Union Line is fed by the immense shipments of merchandise from the great manufacturing centers of the New England States, New York, Pennsylvania, and New Jersey, and by the thousands of tons of fruits and vegetables which come from the South Atlantic States, not all of which go to eastern markets.

Returning, beside the valuable consignments of silk for New York and Europe from the Orient, there is the enormous fruit crop from the Pacific States to be delivered to the markets on both sides of the Atlantic.

Owing to the fact that small lots of freight originate at widely separated points, billed for an equally scattered number of places, it would be impractical to give a separate car to each and carry it through to its destination. To get around this difficulty the transfer-yards have been created, and they have been very instrumental in the development of the fast-freight service.

Pitcairn is the point where most of these transfers are made by the Pennsylvania, and, with the exception of two through trains that run from New York to Chicago, all trains are broken up there and the goods reassorted. In this way all the freight for a certain section, or a certain city, no matter where it originated, is collected here and placed in cars destined for that territory. The changes are made with remarkable swiftness.

Advantages of Service.

Beside the preference freight that is carried over the Union Line, the Pennsylvania maintains a local preference service. This is handled separately by the freight departments of the lines east and west of Pittsburgh. The same fast schedules are met.

It is this local service that takes care of the enormous train-loads of fruit and vegetables from the South which go to the markets of Philadelphia and New York. Much of this is carried to Western cities also, and this comes from Norfolk and the Delaware-Maryland-Virginia peninsula to Harrisburg, where it is sorted and reallotted to the right cars.

A produce man in New York can telegraph an order to Norfolk to-day and sell the vegetables to-morrow. A man in Chicago can telegraph to New York for goods and display it the third morning.

It is the fast and luxurious passenger-trains that attract the public admiration, but it is the less spectacular fast freight-trains that contribute most to the public welfare.

ROBERT E. STRAHORN'S WORK.

Life Story of the Man Who Surveyed the Oregon Short Line's Route.

FROM journeyman printer in a pioneer mining-camp to the presidency of an important railroad is a long step, yet it came to pass in about a third of a century, and the man who worked his way to the top is still in the prime of life.

Robert E. Strahorn, of Spokane, vice-president and general manager of the third division of the Oregon-Washington Railroad and Navigation Company, operating the northwestern lines of the Harriman system, who "stuck" brevier and nonpareil on the Denver *Tribune* in the early part of 1876, went to the top chiefly by his own efforts.

He proved his caliber by keeping a railroad secret for more than five years, and had the best-posted financial writers guessing until he was ready to make the formal announcement that the North Coast Railroad, which he promoted and of which he was president, was part of the Southern Pacific system.

While scattering millions of dollars in acquiring rights-of-way through Spokane and other cities in the State of Washington, Mr. Strahorn was variously designated as "the sphinx," the man of mystery," and "the railroad enigma."

His methods, clean and aboveboard at all times, gave not the least inkling that the head of the North Coast line was once a pioneer in the midst of the rough and tumble of Western transformation for more than thirty years.

Mr. Strahorn's first trip to Spokane was made on horseback via Walla Walla, Washington, and Lewiston, Idaho, in 1879, while investigating the country in the interest of Eastern railway capitalists. The town site and irrigation ventures requiring more capital than was at his personal command, he went to Boston in 1890, and there found that his knowledge of the Northwest was in greater demand than his personal services had been while in the Pacific country, and he remained in the East seven or eight years.

ROBERT E. STRAHORN.

Redrawn by F. A. Tolhunter from a photograph by Loryea, Spokane, Wash.

After settling in Spokane in 1898 to reside permanently, he took up electric-lighting and power projects, constructing plants at Centralia, Washington; Wallace, Idaho; Sumpter, Oregon; and North Yakima, Washington; the last three of which he still controls.

He launched the North Coast Railway Company six years ago, to build an independent line from Spokane and Walla Walla through the Yakima Valley to Seattle and Portland. This project was taken over by the Harriman interests last spring, and is now being rushed to completion.

Began as a Typesetter.

"I well remember the first time I ever heard 'Bob' Strahorn's name mentioned," said Thomas L. Dawson, for years with the Associated Press in Washington, D. C. "It was back in 1877, and the circumstances were a little bit out of the ordinary. Born somewhere in the Mississippi Valley in the early fifties, he emigrated to Colorado while it was still a Territory, and became a typesetter on the old Denver *Tribune* alongside of John Arkins. I went to Denver in 1876, the year Colorado came into the Union as the Centennial State, but Strahorn was not there.

"'Alter Ego!' exclaimed Arkins to me one day as we were climbing Berthoud Pass across the main range of the Rocky Mountains on our way to Middle Park. He was reading from a painted sign on one of the big boulders in Clear Creek Cañon. The words were connected in some way with a patent medicine or a smoking tobacco.

"With that, however, Arkins was not concerned. 'Alter Ego' was the pen name of his friend Strahorn, who had graduated from the case to the position of newspaper correspondent, in which latter capacity he already had won fame, and the appearance of his *nom de plume* on the big rocks aroused Arkins's memory.

"Without coaxing, he told me how, at the

beginning of hostilities with the Northern Sioux Indians, Strahorn had thrown down his printer's stick and headed for the scene of conflict. He soon made a connection with the Chicago *Tribune* and other Eastern newspapers, and as the constant companion of General Crook he was soon recognized as one of the prominent correspondents of that important expedition which had much to do with suppressing the last of the great Indian uprisings.

Companion of General Crook.

"Winter and summer, Strahorn rode and camped with Crook, and, while he was neither enlisted as private soldier nor enrolled as officer, he participated in every engagement, and had many thrilling experiences. The battle over, few other men could more graphically or accurately describe the occurrence.

"These thrilling times when, in 1877, John Arkins and I went on our first tour of Middle Park together, Strahorn was still at the front. Arkins then was the foreman and I was the city editor of the *Tribune*, and those who accompanied us on the jaunt were other men from the same establishment.

"We had fitted up a two-horse wagon, and were out for a camping-tour in the wilds of the Rockies. We were two or three days in making the journey from Denver to Middle Park, and during that time John talked much of his friend Strahorn. His admiration for him was unbounded, and I became anxious to meet the subject of so much praise.

Paid for His Knowledge.

"A few months later Strahorn came to Denver, and I was introduced to him. We were both young men, and then began the friendship, which has continued without interruption. Strahorn never went back to the case, nor did he follow his newspaper work. The familiarity with the new Northwest, which he had gained through his Indian campaigning, proved a valuable asset. His services were sought by the Union Pacific Railroad Company, which then, under the direction of Thomas L. Kimball, was beginning to exploit that great section to the world. Strahorn was one of the first of the railroad 'write-up' men.

"For years he traveled almost constantly for the railroad company, and many of the booklets prepared by him at that time became standard authority on the Western States.

"From the first he was a zealous apostle for that section, and he it was who said if the Pilgrim Fathers had landed on the west shore of the continent instead of on the east, the settlement of the East would have been much longer delayed, because of the superior attractiveness of the West.

"Strahorn practically pioneered and surveyed the route for the Oregon Short Line, and he located many of the towns and cities along the way."

NEW COAL ECONOMIZER.

Intercolonial Engineer Has a New Invention That Promises Much.

J. B. McKAY, of St. John, New Brunswick, has invented a coal-economizer and smoke-raiser for locomotives and steamboats. This invention is of very simple nature, and can be adapted to any locomotive or steamship funnel. The benefits that can be derived from it are said to be numerous. An addition to the smoke-stack is arranged in such a way that it will drive the smoke straight up in the air, besides improving the draft.

It will also do away with the blower now in use in all locomotives. By the additional draft and by doing away with the blower, it is estimated that a locomotive will save about twenty tons of coal monthly.

Mr. McKay has been an engineer on the Intercolonial Railway for forty-five years, and it was during his long term of service that he conceived the idea to try and invent something to prevent smoke from blowing down around the cab and blinding his sight.

Some five years ago he began working on his plan, and now he believes he is successful. Several times he has tried the smoke-lifter on his own locomotive, and after several alterations it has surpassed his most sanguine expectations.

Last summer the patent was tried on the river steamer Sincenees, and it also proved a success there. The engineers who have witnessed the trial of the smoke-lifter and economizer claim that it is practical.

The present blowers on locomotives drive red-hot cinders out of the funnel, which in many cases are the cause of forest fires. It

is claimed that this can be avoided by the new economizer, as red hot cinders will not be blown around

If by any chance cinders leave the funnel they will be cooled before they reach the ground.

FOUR KINDS OF PASSES.

Regulations Issued by the I. C. C., Governing Free Transportation.

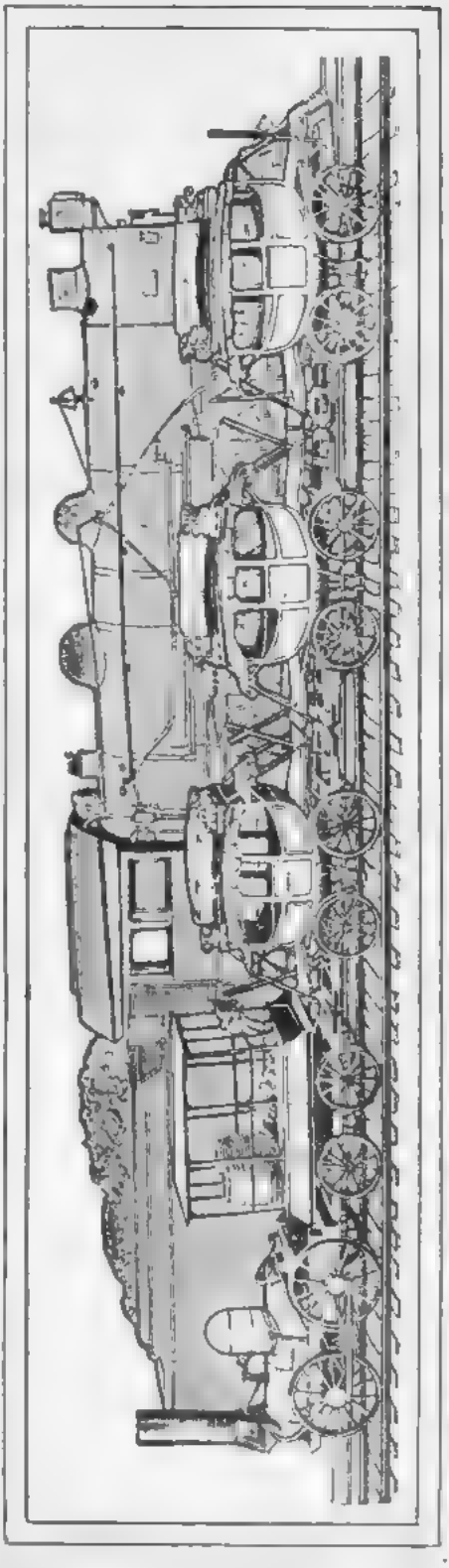
THE Interstate Commerce Commission has issued a revised set of regulations covering the use, issuance, and recording of passes. These regulations become effective on January 1, 1912, and supersede all previous orders. They are the first on the subject, as previous issues have been merely compilations of rulings made by the commission. They prescribe for four classes of passes and make it obligatory on the part of conductors to keep a record of what was formerly considered written evidence of the friendship of railroad officials

The four kinds of passes that may be issued are annual passes, trip passes, suburban or commuter passes, and telegraph passes. They must be printed only on regular pass stock and numbered without duplications or omissions and in series of not less than a year

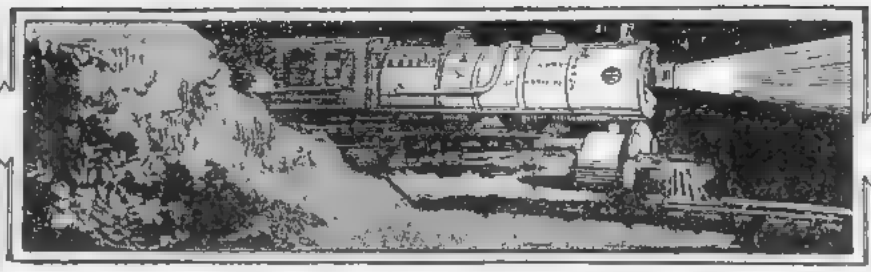
The railroads are required to file with the commission on or before the first of each calendar year a list of officials having authority to request passes of other roads. There must be a written request for every pass issued, unless the case is exceptional, and in that event the carrier must set forth the facts which made it exceptional.

All holders of passes must sign their names, and when trip passes are presented, the conductor must record the number of the train on which each pass is honored.

The only persons who may be carried free without passes are train-crews, sleeping-car, chair-car, and dining-car employees, crews of private cars, newsboys on trains, and baggage agents. The complete record of passes required must be kept either in the books or cardforms prescribed in the book of regulations. They must be kept in places accessible for examination by inspectors



The Wm. Carson, the first locomotive run in the State of New York which with its three primitive coaches made its first run between Albany and Schenectady on what is now a part of the New York Central and Hudson River Railroad August 9, 1831. It here compared with one of the Pacific Type passenger locomotives now in service on the New York Central Lines. The entire length of the first train just equals that of one of the present locomotives. The Carson attained a maximum speed of fifteen miles an hour. The latest Type is the most powerful high-speed locomotive ever built and will haul at a sustained speed of sixty miles an hour a train of ten to fourteen heavy Pullman cars



THE LAMPLIGHTER.

BY LYDIA M. DUNHAM O'NEIL.

Written for the "Railroad Man's Magazine."

HE is only one of the sons of toil,
Who make the road as a whole;
He walks the track with his can of oil,
And he climbs from pole to pole.
He trims the wicks and he cleans the glass,
Each day, year after year,
That the engineers who nightly pass
May know if the track is clear.

Though lonely the labor and small the pay,
Though cold be the rain and snow,
No word of complaint does the lamplighter say,
But serene on his way he'll go.
For there's work to do, and it must be done,
Though the days be long and drear,
For the engineers on the long night run
Must know if the track is clear.

He stops no train on a chasm's brink,
And to death he hurls a frown,
The signal-lights that flash and blink
Will bring him no renown.
But he works with a will, as the bright lights show,
That each watchful engineer
Who passes by in the night may know
If the track ahead is clear.

"Short Flag!"

by Adelbart Bartlett

A HOWLING, snow-devouring chinook raged that Christmas Eve while superintendent's car, A-19, crawled after an Extra West over the quarter-mile "shoo-fly" temporary track at Quincy Wreck, on down to Crater Tunnel, and round the loop, and got stuck on Trinidad passing track in front of two trains of east-bound lumber. It was pitch-dark, mind you, with the rain-driving wind growling down Columbia Cañon.

Besides, things were in a tangle. After our week's blockade from a box-car wreck, there were now bad snowslides on "friendly connections." Ours being the open line—open for a few hours at most, perhaps—over it hurried N. P. détours, and the pent-up traffic of the Hill system in general. So that I, the superintendent's secretary, guessed we were there for one good, long wait

Supper done, I went forward to my desk in the "observation end" next the caboose. For all of three hours I had been at work putting in order a tray of "accident files," when a light flashed without, the caboose-door bumped, and in slouched Davey Jim Walters, of late "gone braking."

"Saw the old man blowin' you to Leavenworth on that first train over," he announced offhand

Glad as I was to see that Billiken grin on the little full-moon face of Davey Jim and breathe the fresh air quick-rushing in, I dropped things, sat up, and took large notice while he tilted back his sou'wester and, bracing his lanky self against the closed door, talked rapidly on:

"Another freight just now pulled in here. That blocks main line and three Big G., and two N. P. passenger-trains a comin'. And to-night them dagos hefted off a ton boulder rollin' on the track ahead of us on this hill. I tell you what, this wind's a-cuttin' snowbanks to a fare-ye-well and meltin' sand-hills."

He seated himself in the wicker-chair I placed at the wall card-table, yawned, and said:

"Thirty-five hours now flaggin' and stallin' at Quincy. But it's no use. Here I'm due in town this minute to take her to that hop."

In the spell of Quincy "home-product" cigars we gave each other minus the "brands," he remarked that it was positively a crime the way despatchers were jamming this little side-hill yard chock-a-block, just to make no end of "saw-bys" for freight crews in a hurry. He would have me understand, also, that of late he was not only growing in knowledge of human nature, but acquiring many first-hand truths about the railroad game. He was cocksure that my existence was narrow and confined.

Davey Jim finished after drawing a big brown envelope from an inside pocket.

"Now do look a-here," he broke in scornfully as I dealt the cards. "Take and read this one from Sandy Willerton, trainmaster, passin' out a dose of the devil's pain-killer for alleged—let me see—' inat-

tention to flagging.' Now, dog my cats! if Sandy thinks I'm just a dyin' to flag for any Big G. drag—well, he's crazy."

I was reaching for his letter when the air-gage at the door clicked, the air released, and we heard three short whistle blasts.

"Saw-by, the deuce!" grumbled Davey, as he grabbed slicker and lantern and dived for the switch.

Then our "drag" backed out on the main line to begin weary hours of crawling, jerking to and fro between yard limits and passing track.

Meantime, old Porter Edward's accordion kept sobbing and wailing in the other end of the car. His tunes were a hideous accompaniment to rain-splashed, drumming windows, so I was glad to look out at the rows of cheerful yellow squares going by on the next track—motion-pictures they were of young and old, gift-laden, homeward bound for the holidays.

At 10.30 o'clock big, square-faced Murphy, the roadmaster, burst into the car wet and blustering. He went to bed in the superintendent's berth.

Then I must have dozed, for, startled by a high-screeching dynamo, I opened my eyes to a dazzling headlight blaze aslant the windows.

The car was all aquiver. I thought of Davey Jim and his indifference to duty. "Are they into us?" I asked myself, shuddering, but breathing easier, when—

"Second number two-o-o-o!" called out the brakeman on the train rip-roaring upgrade.

"Extra twelve-forty!" from our caboose.

And as quickly as I could undress and turn into my berth we were poking down the yard

Over the west yard-switch we rapidly got under way, and soon were staggering round a curve five hundred feet above the mighty, flood-swollen Columbia River.

Our engineer was reckless, I thought, to run so fast over a thawing track; but then, if he would pull us somewhere after a solid week with a wrecking train in the dreary Big Bend, why not roll now?

Thus I reassured myself. The regular pounding of the wheels over rail-joints and the gently swaying car brought dreams. Soon I changed to fancy's train, that sped me very near the past. It is grandfather's house-warming. We children toss fir twigs on the snapping grate-fire, while our aunts at the grand piano play and sing duets. I breathe balsamy incense and thrill with music that dances. The oaken doors of the ballroom slide apart, and, in rapture, I see the giant, popcorn-wreathed Christmas tree, all aglow with golden tinsel.

A terrific rumbling; an upheaval; a crashing and splitting! The fairy lights burned faint and fainter, and then snuffed out; the scene melted and the figures grew dark.

Hurled with amazing swiftness through a zone of silence and blackness, my head struck crushingly. With every pulse-beat, what seemed to be a hot knife cut deeper into my neck.

I lay motionless and breathless, unable to bend a muscle. I could hear my heart pounding hard. I was trying to make an outcry

"What—what's-a-matter here? What's-a-matter here? Them crazy trainmen'll kill me yet!" piped a shrill, far-away voice in the silence.

A long time passed before I knew it was Murphy in the opposite berth.

"Them crazy trainmen are into this car!" he screamed in my ears.

I managed to raise an arm; my head tore away from shattered glass; cold rain drenched my face. Dazed, I somehow got to the now steep floor of the aisle. Then I stumbled and fell down through the open kitchen-door and brought up against its further door, which had slid half open. The kitchen lamp, still burning low, shed a sickly light. The clock had stopped at 12.15.

"Wreck—they've hit us right," I remember gasping in choking surprise as I looked into the wreckage-filled room.

In the left-hand corner a crushed tail-light sputtered red and went out. It was plain that the A-19 was resting with rear-end knocked in and rear trucks gone, and had swerved away to one side in falling to the track.

Back in the gloom of a rock-cut stood some dark engine whistling out flag—a whistling that made my head ring painfully.

I shivered, too, my blue pajamas being unequal to the inpouring cold; my jaws involuntarily clashed together like mad; and there was a warm trickle down my neck. But I was trying to forget it, when I saw a pair of tiny green lights topping a white-shrouded something that lurked in the wreckage.

"Are you hurt? What you doing?" I asked; for how could any one be alive in that end of the car?

The slim figure straightened, with raised hands.

"Thank de Lawd, I'm not hu't. Done lost my specs," came the tremulous voice of old Edward. He had escaped somehow, though in the dimness I could see that his "wall-bed" was piled with splintered woodwork.

As he crawled outside my pent-up emotion gave away in hysteric laughter. What seemed funnier still was that my "size-15" neck should support my ever-increasing head. But I nearly froze when, in turning, I met the wild eyes and hot breath and withering gaze of Murphy, who muttered blasphemy at all trainmen.

Steam now issued from the cylinders of the engine back there.

"Look out! Look out! See! See! That big black devil's comin' again!" he screamed in falsetto, swinging his long arms like one possessed. "Git a door open, I say! Git a door open, I—"

But the engine stopped at least fifty feet away.

Returning to the office, I found the glass end-door and all the four windows intact but jammed, so, with a chair, I broke out a window on the side next the mountain and raised the door-curtain.

I could see that we had parted from the rest of the train. Our forward trucks seemed to be still in place.

Then, from the caboose, which was a hundred feet ahead, I saw Burke, the conductor, and a half-dozen extra gang-men of the wrecking-crew coming with lanterns. Some one, whistling gaily, came up and met them alongside the A-19.

"What are you, Crissman, and why don't you stop for a feller's flag like that?" Burke demanded in angry voice.

Although the men were close to the broken window, I could barely hear above the loud wind the gurgling of a freshet, and a rumbling I could not yet make out.

"Fourteen sixteen—light engine—short flag! Stop her? Stop here, I say? Nothin'. I give her the 'mergency. No time ourselves to jump. About slid over your flagman right there sleepin' on the track, I guess so. No guns—nothin'. Twenty-four minutes we had to make Rock Island. You? Didn't know youse on the road."

Then, tapping the car, the engineer spoke in a lower tone: "Say, why don't the old man get out o' there?"

"Naw—he ain't in there," said Burke. "But listen here now; track-walker flagged us two miles down and we slowed to five miles, and I sure told Davey Jim to get busy. Pretty nigh over tops of cars to engine I was beatin' in when I saw you comin' fast back there, and that boob flagman just lightin' that fusee. Now, there he comes in! A can for him."

So saying, Burke stuck his lantern through the window. At the sight of me he shrugged his shoulders.

"Hurry up and climb out o' that car—you! Track washin' bad here!" he warned.

Sure enough, as I stepped between the berths, the floor of the car settled. Murphy, now silent, was dressing in all haste.

The flapping window-blind jerked aside, and I knew we were at the curve ten miles down the cañon from Trinidad. Opposite—over the gorge—was that black wall of rock towering high above us, and from the dark river a hundred feet below rolled up thunders of sound.

"Come out o' that car or you can't! Dangerous, I tell you! She's liable to go down that bluff!" It was Burke, rapping on a window.

"Yes, yes, yes!" mumbled Murphy.

I paid but little heed. I was so fascinated and unmindful of danger by this terrible picture of the black, foaming, thundering Columbia that I threw myself on the berth for a nearer view.

The rain-driving chinook that beat like ice in my face was clearing the cañon-walls of snow. I had but a little time to look, for in the next moment the car suddenly gave backward, then lurched to one side, and began turning over!

With breath gone in horror, I sprang for the curtain-pole above the berth, but missed it, while Murphy's writhing, maniacal bulk was thrown against me just as the car plunged rear-end foremost down the rocky steep; a swoop down, down, that made me dizzy and taut of muscle, like falling from the roof of a sky-scraper in a dream!

A fearful reality came when this twenty-ton cage of glass and iron and wood crashed into that seething chaos below, and the icy flood and blankness closed in.

Suffocating, I was bumped against the roof and then on the floor, and rolled over and over, and thrown floundering in absolute and terrifying darkness; and through it

all was a roaring sound of immense volume.

As my body struck and lodged this roaring burst high-pitched, rising and falling, almost wildly musical.

I could breathe! Though painful, I could breathe!

I clawed at jagged glass in trying to pull myself up through an open square. Always, always a hand clung vise-like to my right foot. At length I gained a riffled surface awash with icy spray. And something crawled after me

The black waves roared and churned wildly about me. Close by there appeared to be a half-sunken boulder. A light showed on it and shoutings came from that direction.

I put all my waning strength to clutching the slippery car-side. But help seemed never to come. Then, of a sudden, I passed into a wondrous purple atmosphere where the constellations were toppling and falling in showers of glory, while in my ears there boomed deep bell-tones.

So it ran for centuries in a strange and remote world; such showers of myriad stars from a blazing sky, and the thunderous booming of deep bell-tones.

Then all was blankness again. By slow degrees I became mindful of a group of nodding heads over by a little stove, and of a sharp *click-clickity-click* on a table.

Bending over me, tucking in the covers, was Davey Jim. His careworn eyes beamed kindly as he said something about our spending Christmas day in the Vulcan telegraph-shack that I could not quite make out. Then I slept peacefully.

EARLY CAR-LINE USED MULES.

Was Built in Missouri by Pioneers and Ran Over Rough Ungraded Road Between Wayne City and Independence.

PROBABLY the first street-car system in this country, not taking into consideration that constructed in New York City in 1831-1832, was a country line, about five miles long, in what was then the Far West. The termini were Wayne City and Independence, Missouri.

Wayne City was wiped off the map more than a half-century ago. When it existed, it was the landing for steamboats that had passengers or freight for Independence, the capital of Jackson County, and at that time the metropolis of northwest Missouri. Wayne City antedated Kansas City as the shipping-point for freights for the Santa Fe trade.

Independence was an aristocratic burg. It was the place where negroes were sold at public auction in front of the court-house. It was also the principal mule mart of that section, for the great freight wagon-trains were made up there for the southwest.

The Independence and Wayne City street railway was constructed for the accommodation primarily of the nabobs of the county seat. The topography between the county seat and the steamboat landing would have made the rocky road to Dublin look like a concrete sidewalk. The nabobs did not care to risk their barouches on the rough highway, so the street-car system was built and operated until Independence was overshadowed by Kansas City, at that time known as Westport landing.

The rails of the system—they were of wood—ran with the lay of the land. Not a foot of grading was done. The rolling-stock consisted of two cars that resembled wheelless omnibuses. Each was drawn by four mules.

The driver was a negro who was an expert. Seating capacity was never considered. There was always room for one more passenger. When the interior was packed, the roof of the car accommodated the overflow. Baggage was shipped by wagon.

The line was operated only during the season of navigation. In the dry spell the dust along the way was raised by the mules so that when the cars reached their destination the passengers looked like frescoed figures.

That was six years before there was a street-car line in Boston and seven years before one was built in Philadelphia. It was ten years before there were street-cars in England. The horse tramway was not known in Paris until 1856, when a line was constructed between Paris and Saint-Cloud. Horse-cars were not known in the city proper until 1875.

It is interesting to revive these figures, showing that the system was in operation in the interior of a new country before it was inaugurated in the Old World.

It would be more interesting to tell the story of the inception of the line in Missouri, and of the men who blazed the trail, but the Civil War on the border wiped out volumes of data necessary to historical continuity.

SAMPSON

by Chauncey Thomas

CHAPTER IX.

Pound Nugget.

SAMPSON sat alone in his private office at the bank. If he had known how he would have worried. As it was, he tried the door, saw that it was locked, and then he opened a small private safe.

Now, this safe had been a mystery in the First National for years. Not even La Pier had seen Sampson open it. Its contents were strictly private, and Sampson was not a man of whom you could ask careless questions.

According to rumor, that safe contained a million dollars. Sampson opened it, pulled out a pair of old, ragged moccasins, a battered brier pipe, and a copy of "Robinson Crusoe."

He half closed the steel door, then stopped it with his braced leg, and, reaching in, took out another book. On the cover was a picture of an ancient dame sailing through the clouds astride a broom—Mother Goose.

No constant strain clogged Sampson's mind. It was not strong enough for that, though it held the best financial gray matter in the West.

Other men worked all day, worried all night—and failed. With the combined power of a human telescope, Sampson focused his faculties during the day; at night he read Shakespeare, Hugo, Mother Goose, or played at doll-house with a little four-year-old orphan. And, financially, he ruled the West.

"Money just can't stay away from him!" Sam once remarked. "Sampson, the magnet," was a term that caused dead enterprises to rise with a bound or new ones to form like clouds.

But this day Sampson had a great failure. For ten years he had been planning, scheming, working toward one great end known only to himself—to corner Cripple Creek.

This was an enterprise worthy of even the Rothschilds. It had proven too large for Sampson. With all his millions, his brains, and honesty, he had all but closed the vast deal—when three of the chief mine-owners changed their minds. Sampson's personal integrity, on which the success or the failure of the consolidation hung, they doubted. They were new in the West.

This was not the reason they gave; but Sampson scented the truth as an antelope does water.

Sampson kicked off his boots, pulled on his old moccasins, slid into an easy chair, filled his pipe, slowly lighted it, and grunted as he stretched his legs into his revolving office chair.

"When in doubt—smoke." He lazily picked up a book and left the earth and its cares far below, as he and the lady careened toward the moon on a broomstick. Such was Sampson at fifty.

Before the bank president took rest from the little safe, another matter had hung in

Began in the October Railroad Man's Magazine. Single copies, 10 cents.

his mind—"Pound Nugget." The Pound Nugget was the nickname of the "Pound Nugget Gold Mining and Exploration Company, capital $1,000,000, non-assessable, etc." It claimed to control by right of discovery fabulously rich placer-fields somewhere in the Rockies.

Three men controlled the company—Dutton, Foster, and Mitchell. Some two months before these three had set fire to every newspaper in the State and had the mining public straining and dancing on tiptoe because they had arrived in Denver dressed in old clothes and were driving four jacks packed with a prospector's worn outfit.

Nothing remarkable in all this; but the ten one-pound nuggets of virgin gold that the three silent men turned over to the First National for safe-keeping and display were remarkable.

The news spread like hot oil on still water. Pressure on the silent trio to tell where they found the beauties was enormous; but to no purpose.

Dutton was grimly silent; Foster laughed; Mitchell made awkward blunders that gave hints

In a week the three men—aided by eager financiers—had a company floating on the market; not one of your sky-rocket-and-stick, ten-cents a folio mining-stock companies, but a stringently organized concern with stock going at par like hot cakes.

As a guarantee of success, not a share of the brilliant green-and-gold stock was to be issued until one-fourth of the capital—$250,000 in actual hard cash—had been paid into the First National in trust.

It was arranged in this way: you became excited, rushed into the Pound Nugget palatial office, relieved yourself of your money, and in return received an order on the First National Bank for stock; or your money back in case the full $250,000 was not subscribed within sixty days.

"Any scheme where you get your money back will bear watching," said Sampson dreamily.

The $250,000 all had been paid several days before. To-morrow was the day the stock was to be issued, and the money turned over to the Pound Nugget Gold Mining and Exploration Company; or, in other words, to a rather elaborate name for three unknown men.

Two hours passed. Sampson and Mother Goose arrived on earth just as the brier went out. He laid down his book, stretched, yawned, and admiringly watched the skill with which he could wiggle his toes through holes in his old moccasins.

"Wonder if there is any milk and stale bread in the kitchen at home," mused the bank president with a burst of interest.

Then the thought of the haughty butler, and the four prim but demure damsels who dwelt near the kitchen, swept over him, and he quailed.

A hungry longing for a certain milk-cellar in the States, with a great awkward boy—old silver spoon and white bowl in hand—shambling down the steps, gave his face a quizzled look.

"Master of millions and of men—and can't eat in my own pantry—ugh!" and Sampson's philosophy failed him. He shook off the mood, replaced his treasures and locked the safe securely.

"To-morrow, the twentieth, Pound Nugget goes through. It's all right, I know—but I don't like it. Why, I don't know. Instinct, I guess."

He stopped instantly, stiffened into the bank president, and picked up a revolver.

It was the long-barreled holster-gun which he had brought across the plains in the early days.

Some one was tapping rapidly but gently on the curtained window-pane.

Cocking and concealing the weapon, Sampson stepped to the window and drew aside the heavy shade.

A man on the sidewalk motioned toward the private door.

Through the glass Sampson could not understand what he said; but nodded, dropped the curtain, and with echoing footsteps crossed the now silent and deserted bank.

He set the chain-bolt that allowed the private door only eight inches, and unfastened the spring-lock. He was no coward to take these precautions. A lone man admitting a stranger into a bank at night is a fool—and Sampson was not a fool.

"What can I do for you?" he asked.

"You're Mr. Sampson, president of this bank, I believe?" replied the stranger.

Sampson silently nodded, and fingered his six-shooter.

"I have important business to lay before you, and it must be done to-night! I am sorry to trouble you, but I have been out to your house, and they said you were here; so I came. I am Hutton Webster, a Scot-

land Yard detective. I arrived from London about an hour ago. Here are my papers. Satisfy yourself."

The stranger handed Sampson a black leather bill-book.

Sampson took the book and locked the door, leaving the stranger on the outside. In a few moments Sampson opened the door and quietly and courteously requested the stranger to enter.

Half an hour later both men were smoking quietly in Sampson's private office. On the desk were the ten one-pound gold nuggets.

"Beauties, aren't they?" said Sampson. "So these belong in England, do they? You say that these three men escaped from Australia, and that they made their way to London, where, in a bank burglary, they accidentally found them, and, being miners, came here and worked up this Pound Nugget scheme? A first-class piece of work—deserves hanging, don't it?"

"They'll get twenty years at least," replied the detective. "But I dare not make a move till my papers get here, or I'll lose them. To pull them in the morning with no evidence would break up this game probably—"

"I don't know that it would, that's the trouble," mused Sampson. "This bank is under bond to carry out that delivery tomorrow; and your word—with no discourtesy to you—is not enough for the bank to refuse to make the exchange. To refuse, and then find out that you are mistaken, would subject the bank to a heavy damage suit; probably cost us a hundred thousand or more before we get out of it. No, Mr. Webster, we can't do that; though I believe you are right, we must have proof."

"Give me three days and I'll give you proof."

"But the stock is all made out, signed, sealed, all ready to exchange for the receipts. The stock-certificate book—wait, I'll let you see for yourself."

Sampson brought the book of gaudy certificates from the vault. Webster examined the book with interest.

"Printed in New York," he murmured. "Say"—with animation—"is this the only certificate book this Pound Nugget outfit has?"

"Yes. Why? This reached us direct from New York a week ago. The plates are there; and these are all the certificates in existence."

"Why can't something happen to this book?" asked Webster.

Sampson slowly lighted a cigar. "Don't see how. Wish something would. Any suggestions?"

So the banker and the detective talked it over; the former hesitating to risk plunging his bank into trouble on no stronger evidence than a well-recommended stranger's suspicions and his own unsupported prejudice against the three suspected men. His instinct, however, told Sampson that the men were guilty, and instinct is usually right.

The bank opened as usual next morning. An eager crowd were gathered to exchange receipts for Pound Nuggets. Half an hour went by, and the certificate-holders next the window began to grumble.

Dutton, Foster, Mitchell, and Sampson were holding a hot and cold discussion in Sampson's private office.

"Can't help it, gentlemen; very sorry, but the book is gone. Where? Who can tell? When a thing is stolen, it's stolen, isn't it?" said the president.

"Come, boys, we'll sue this outfit. Mr. Sampson, you can't monkey with us," said Dutton.

"No use, gentlemen. Theft releases the bank from all intent not to carry out the deal. I have already wired to New York for more certificates. They will be here in three days—"

"Three days nothing!" interrupted Dutton. "Ten days at the least. It'll take 'em a week to print new ones, and three days to come! You've got to prove to us that book was stolen or we sue the bank. The game is too thin! Stolen!"

Foster and Mitchell both growled, "That's right."

Sampson was troubled. He hurriedly lit his cigar, thought a moment, and blew a quiet puff of smoke.

"Well, if you must have proof, one of our clerks stole it under the fool idea that it was valuable. We are watching him so as to recover the book, but I'll have him arrested if you say—though I advise you to keep quiet till we can locate the book."

"Pretty thin stuff, Mr. Sampson. That bluff don't work."

"If I'll put that clerk in the penitentiary inside of a week, will you agree to wait until the new certificates get here, unless we find the old ones first?" asked Sampson.

Dutton hesitated.

"Or I'll fight you to the court of last appeal," continued Sampson.

Mr. Dutton had an aversion to the law. Foster and Mitchell shared his prejudice. All three nodded at Sampson in sulky assent. Sampson rapidly wrote out the agreement, signed it, and handed the pen to Dutton.

Not daring to back out now, the miner scrawled his name under Sampson's. Foster and Mitchell did the same.

Sampson pocketed the agreement with one hand, and pressed a button with the other. The button was labeled "Police."

Sampson rang seven times, then handed cigars to the trio, and motioned to chairs. The three looked at each other. Dutton's great jaws hardened; he looked contemptuously at his companions, and all three sat down.

"An officer will be here in a moment," explained Sampson.

Sooner than that Swift, chief of detectives, entered the room. He had been awaiting that signal in a back room.

Sampson nodded, and pushed another button. Sam's black face appeared.

"Tell Mr. Whipton to come here."

In came Whipton.

"Mr. Whipton," said Sampson slowly, "you were here in the bank between the hours of seven and nine last evening, I believe."

"Yes, sir," replied Whipton, with a lump in his throat.

"What were you carrying when you left the bank?"

"Nothing, Mr Sampson."

Sampson smiled slightly. "Think again," he said.

"I believe I did have my laundry," stammered Whipton.

"You had the vault open?"

"Yes, sir."

"Who put away the Pound Nugget stock-book last night?"

"I don't know—yes, I remember seeing Mr. Ellis place it in one of the safes."

"Mr. Whipton, where is that book?"

Whipton, in terror, refused to answer.

Surprise showed in Sampson's face as he questioned the silent Whipton. Swift was excitedly pulling his mustache.

"Mr. Swift," said Sampson, "arrest this young man. Charge him with safe-breaking until I can prepare the proper papers."

"Come," and the officer took the stupefied Whipton by the arm. The office door closed behind them.

"Gentlemen"—there was an odd ring to that word in Sampson's voice—"are you satisfied?"

"We'll wait. Hurry up those certificates. We'll pay all telegraph-tolls. Morning."

The three men hurriedly left the bank. Sampson gazed after them, glanced around him, and then winked.

"I'm on the right track," he said. "Sorry for Whipton; but I will make him assistant-cashier in Baxter's place to square it with him."

Sampson chuckled and slowly lighted the stub of his cigar.

"But I don't understand Whipton's actions," he murmured after a troubled silence of five minutes.

Six men followed Dutton, Foster, and Mitchell up Sixteenth Street. Dutton stopped in his tracks. It dawned on him that Sampson had a written agreement signed by himself and his comrades, but that they had not a line signed by Sampson.

Discreetly concluding not to reveal his blunder to Foster and Mitchell, Dutton simply swore, and resumed his walk.

CHAPTER X.

As Shown by the Books.

"E-X-T-R-A-A! E-x-t-r-a! All about the robbery of the First National Bank!" shrieked the newsboys.

In an isolated cell sat Whipton, white, gaunt, silent. All that day only two words had passed his lips:

"Thank you."

This was in return for numerous drinks of water. His food was untouched.

"Why didn't I carry poison, only a drop of prussic acid, for this? Fool! Fool!" he kept repeating to himself. By the orders of Sampson, Whipton was allowed to see no one.

Almost as silent, Sampson sat in his private office.

"Odd, extremely so," he mused. "Can anything be wrong? Whipton acted so—But then there is no telling what a boy will do under such circumstances. Sorry, but he'll never regret it. Yell, you monkeys!"—to the newsboys. "In three days you will be singing a new song and Whipton will be a hero. Yet how—why did he—"

There came a quiet tapping on the door.

"Come in."

Ellis, the head bookkeeper, and Shafter, the assistant receiving teller, entered. Both stood silent before Sampson's slightly raised eyebrows.

"Well?"

"Mr. Sampson," began Ellis, "Mr. Shafter and I have something important to tell you. Can we be alone for a minute?"

"Lock the door." Shafter obeyed. "What is it?"

Shafter uneasily shifted his weight from one foot to the other as Sampson's needle-pointed eyes touched him. Sampson noticed this.

"A bad sign," was his inward comment.

"Mr. Sampson, it is this. Whipton has been our friend; but we, as honest men"—Sampson's eyes narrowed—"must tell of something we have noticed almost for a year, and also what we found out to-day.

"Mr. Sampson, Whipton has been changing the books of this bank. In straightening up his work this afternoon, Shafter and I found false entries, not of items, but of figures—nine hundred made to read nineteen hundred, for instance. So we thought we would tell you of it—" Ellis stopped blankly.

"Let me see—but wait. Don't either of you speak of this to any one—not even to your wife, Shafter—or it will cost both of you your places, besides getting you both into trouble. Remember, now."

Sampson's voice was iron, for Shafter was known to tell his wife all he knew.

"We won't," spoke both clerks at once.

Then, under their guidance, Sampson went carefully over Whipton's books.

"Not only that, Mr. Sampson," whispered Ellis, "but he's been making changes in my books at night when here alone, and also in Shafter's; and in how many others we don't know. See here."

Ellis pointed out an item in his ledger that did not agree with the paying-teller's books by over three thousand dollars.

"But this is in your own handwriting?" said Sampson.

"So I thought, too," replied Ellis. "But when I examined it closely, I saw it had been forged so closely as to fool even myself."

The item pointed out did show a slight difference from Ellis's usual hand. The writing was not so firm and showed that a nervous hand had penned it.

Sampson spent an hour over Whipton's book, then entered his private office.

"So that's it, is it? That's why Whipton had nothing to say—yet I don't like the looks of those books. It seems odd that all the false entries should be in Shafter's and Ellis's books. Whipton's books show only the addition of a 'one' here and there. That 'one' any pen expert can make with a single downward stroke and leave no trace of forgery."

Sampson was bitterly silent for half an hour. Then his icy self-command gave way. Springing his jaws open, he snapped them like a wolf.

"Enough stealing has gone on in this bank. Now, into the penitentiary they all go if it breaks the bank and me. I will rule or ruin. I am master here."

Sampson's eyes had hardened, his teeth were clenched, his nostrils dilated and quivering.

The fighting brute of the cave-man in him was aroused. He was rarely angry, but when he was—

"But slow, Sampson, slow. Keep cool, cool, you fool. Cold reason rules the world. Don't burn, but freeze them," he muttered to himself.

After a grizzly-like pace from side to side of the little office, he opened the door and entered the world as unruffled as polished steel.

CHAPTER XI.

The Trial.

THREE days later, at ten in the morning, the clerk of the criminal court chanted his senseless formula:

"Hear ye, hear ye, hear ye, everybody! The honorable United States District Court is now open."

"What is the first case?" asked Judge Ames.

"State *versus* Whipton, embezzlement," replied the clerk.

There sat Whipton, still silent, more gaunt than ever, even ghastly. Uneasily twisting in their chairs were Ellis and Shafter. Lowering at the prisoner were Dutton, Foster, and Mitchell. They were uneasy, but with a brutal defiance that suggested the prisoner's box.

Three bank-ledgers were on the table. The district attorney was studying Whipton's figures. Mr. Bell, the lawyer for

the First National, was sharpening a lead-pencil.

A young man named Andre—a friend of Sampson—sat fortified behind a pile of law-books, his head resting on his hand, his fingers in his hair. He was Whipton's lawyer. This was his maiden case. Gloomily he looked forward to defeat. Sampson sat like an electrified bulldog. The white-haired judge looked down. All was silence.

"Guilty or not guilty?"

Silence still. Whipton, the wax-covered skeleton topped with grizzly hair, seemed a corpse, but his eyes showed feverish life.

"Mr. Ellis, take the chair," said the district attorney in businesslike tones.

Ellis swore to finding the changes in the three books that covered a steal of $46,829. He had often noticed Whipton poring over first this book, then that, under the pretense of learning how they were kept.

"Did you ever see the prisoner make an entry or change in your ledger, Mr. Ellis?"

"Yes, sir. Twice I caught him doing it, but Whipton said he was only figuring on a piece of scrap-paper lying on the book. As the last entry appeared to be in my handwriting, I thought nothing of it at the time, not knowing of his skill at forgery."

"That will do. Mr. Shafter, please take the stand."

Shafter's story was the same. A questioning glance from the judge and from the district attorney to Andre brought only a shake of the head

He did not care to cross-examine. He would rest Whipton's case on a plea for mercy—and the less evidence the better.

"Mr. Sampson, will you please take the chair." The prosecutor was very polite.

Sampson's powerful form filled the chair. The banker looked at the justice. The judge and Sampson, thirty years before, had slept under the same blanket, and had eaten mule-meat out of the same pan while Indian bullets and arrows hissed over them.

"Your honor," said Sampson, ignoring the district attorney and addressing himself directly to the court, "may I tell what I have to say without interruption?"

"It is unusual—but you may." The judge spoke evenly but his voice was rich with interest.

"Your honor, Mr. Whipton is innocent."

"But, your hon-o-r, I protest!" shouted the amazed district attorney, bounding from his chair.

"Sit down," growled the judge. The lawyer opened his mouth to speak, but something in the judge's eye closed it again in silence, and the public prosecutor turned to his chair, flustered and bewildered.

"Go on, Mr. Sampson," continued the judge.

Sampson was looking at Whipton. Like a stiffened deer straining from its bed, and finding a bear breathing in its face, so arose Whipton. The gaze of the room was focused on that face of white eagerness.

"Yes, my boy"—Sampson was speaking straight to the prisoner—"you are innocent. *Stop those men!*" he roared, towering to his feet and hurling an accusing arm toward two men slipping rapidly from the room.

They were Ellis and Shafter. Six feet four and a yard width of club-armed uniform filled the door. The two bank clerks, panic-stricken, returned to their seats.

"They are the men who did it—and those—" Dutton, Foster, and Mitchell hardened under Sampson's pointing finger.

"It's a lie!" snarled Dutton.

Foster sneaked his hand under his vest to his waist-band.

"I'll show you how a Malay kris will slice its way out of here in a minute," he mumbled to himself.

Mitchell's face changed from a foxy smile to a doughy, troubled look. Sampson ignored Dutton.

"Your honor, three days ago that man in the corner—Mr. Hutton Webster, one of the detectives of Scotland Yard—convinced me that the Pound Nugget scheme was a swindle; but we had no proofs. I now have the proof, and lots of it. Here it is. To gain time, I myself took their stock-book from the safe. Irregular, yes; but necessary to protect honest, innocent people; and to head off thieves."

Dutton showed his teeth.

"These gentlemen threatened to sue me. To gain those three days, Mr. Whipton had to endure much that was painful; but now the time has come to clear him of even a suspicion. Mr. Whipton is reinstated in the bank—but not in his old position. Tomorrow morning he becomes the assistant-cashier—"

A cheer drowned the voice of Sampson, clerk, and bailiff. Whipton sank into his chair with folded arms and head hanging on his breast. He shook as if cold, while tears sprinkled his cheeks. Foolish ones tried to grasp his hand.

The clerk pounded, the bailiff stormed, but the public cheered. Whipton's lawyer was dumb. Matters had gone beyond him. With the district attorney it was almost the same. Bell, Sampson's lawyer, still sliced the pencil, now almost a stub. He was hugely amused.

The seats of the three miners were empty Dutton, swift of thought, followed by Foster and Mitchell, was plowing his way toward the windows. Foster's wavy knife kept all hands off his leader. Then from under the window arose Webster with a revolver in each hand.

"McGee, it's no use. Halt! Ashton, drop that knife—or I'll kill you! I saw you stick my brother; and I'll take no risks with you. To have an excuse to kill you would be a pleasure."

Foster cringed before the weapon of his old keeper. Mitchell grinned sheepishly.

"Jig's up, put 'em on," said the sullen Dutton, as he held out his wrists for the handcuffs.

Webster snapped them on, then locked the three criminals together.

"Sit down," he ordered, as if speaking to an ugly dog

Hampered, the three awkwardly obeyed.

The judge raised his hand.

Sampson's eye was trembling; but his mouth was wood. He said:

"As to the perjured testimony of Ellis and Shafter, it places stripes on their own backs. Thirty years of banking has not left me blind to pen tricks. Ellis and Shafter made those false entries in their own books. Whipton's book contains not a word, or a letter, of his own that is incorrect. The only thing wrong is the addition of the figure 'one' here and there. Look with a strong glass and you will see that the ink of these false 'ones' is fresher than that of the other figures. Those 'ones' were the only thing these cowards dared enter or change in Whipton's books because of the danger of detection."

"Mr. Swift, serve your warrants on those two criminals. Mr. Webster will care for those three," said the court.

Dutton blazed at the witness. He might as well have thrown firebrands at an iceberg.

"If any honest person suffers from all this," continued Sampson, "I alone am to blame and will settle all losses from my own pocket. Your honor, I have nothing more to say."

"You seem to have said enough," remarked the judge dryly. "Mr. Whipton, you are discharged. Allow me to congratulate you. Mr. Clerk, adjourn the court."

The judge rose. Silence once more filled the room. For an instant the man in the justice unfolded. The scene—the most unique of his nineteen years on the bench—brought fleeting lights and shadows over his face. Then the personification of the law turned, stepped down, and passed into his chambers.

Ugly rumbles came from the crowd packing around the five prisoners. With drawn revolvers, the three officers rushed their men from the room and into the patrol-wagon.

Swift stopped an instant and glanced back at Whipton, still silent, white, and dazed

"Denmark's got funny things in it," was the way he fitted *Hamlet* to the scene—then went out the door.

Whipton's lawyer, delirious with joy, collected more retainer fees in the next ten minutes than he had in the previous year.

"Come, my boy, let us go home," said Sampson, his hand on Whipton's shoulder.

Whipton glanced up. His eyes were wells of half-understood gratitude. Then he quailed.

"I know it has been hard, my boy; but brace up! Brace up!" said Sampson, as he slapped Whipton on the back.

"*I will!*" rang from Whipton's lips like hammer-blows. He straightened his feet.

"Good!" laughed Sampson, though it was assumed. He was fearfully conscious that perhaps Whipton's hurt was deeper than he thought. Yet in those words was a power that Sampson did not understand just then

"Think, Whipton, you are the hero of the city this morning. True, three days ago it was baying at you; now it will adore you—but that is human nature. This has given you your start in life; saved a quarter of a million of honest money; and—more than all has shown you who your friends are."

Sampson, generous as are all men big of heart, head, and body, forgot his own part. Whipton did not.

"I am deeply grateful, sir," he said weakly. "You must let me rest now. In three days I have lived on misery and water. I want a breath of fresh air. I will call at your house this evening."

But Sampson would not have it so. With

his own hands he helped his sick clerk down the steps and into his private carriage, and to the driver said: "Home."

As they whirled up Sixteenth Street the jammed thoroughfare opened and a cheer swelled around them and rolled like a wave. Just who or what they were cheering the crowd knew not; but a splendid as well as a shrewd thing had been done that day, and cheer they must.

Sampson was more than millions happy. Whipton did not hear the cheers—only a deathless voice within.

Sampson's home was reached. Whipton tried to eat, but failed. He gulped water—nothing else.

CHAPTER XII.

Montezuma.

BEHIND the carriage had rolled another, in which were four men; the three mine-owners whom Sampson had failed to win over and their lawyer.

No sooner was Sampson alone with the miners than they offered to come into the Cripple Creek combine. The deal lacked only their signatures. Into the carriages and to the bank dashed Sampson and the miners.

An hour later Sampson was master of Cripple Creek. All the mines were owned by a stupendous corporation with $112,000,000. The $100,000,000 went to pay for the mines, the other $12,000,000 went to Sampson. It was his commission. In work of seven terrific years was done. In a broader yet comparatively unimportant sense it was the work of a lifetime.

Calmly the triumphant bank president returned to his home. He was tired. Few men know how tired he was, for few men ever engineer a $112,000,000 corner. Yet Sampson's powerful, smooth face gave no sign—not a hair of that iron-gray, shaggy head was awry. But in his angular, steel-blue eyes was victory!

As he stood in his library at home waiting for Whipton to come down-stairs he scratched his head dolefully and said to his wife:

"Well, I'm master of a hundred gold mines—"

"And of nothing else?" she asked archly.

Sampson looked at her quizzically. "If you were twins, I'd be a Mormon," he said as he gathered her in his arms.

Whipton silently entered the library, and Mrs. Sampson went up-stairs.

"Well, Whip, my boy! Feel better? Come! You don't look it. Don't take this so much to heart. Here are the papers that make you the assistant-cashier. Besides, here is a check for $50,000—a little personal matter between us, you know.

"Through you and that trial to-day I closed a deal on Cripple Creek that gives me control of the whole district, and nets me twelve million dollars besides. So I can afford to do the square thing by you. Why! You don't even smile. Come! Brace up! To look at you one would think you were as guilty as those others!"

Sampson laughed heartily.

"I am. It was I who stole that express package two years ago. Lock me up. I'm glad it's all over." Whipton turned and went to his room.

For a minute Sampson did not move. For half an hour he walked the floor; then went to the telephone.

"Give me police headquarters. Hallo, Mr. Swift in? No? Please tell him to come up here—Mr. Sampson's—just as soon as he comes in. It is important. Thank you."

With sad eyes, but set jaws, Sampson settled down, lighted a cigar, threw it aside, and lit his pipe.

He sat for a long time with closed eyes. Finally rousing himself, he reached for the story of Jean Valjean, and read of the bishop and the convict. Then he looked long at the fire; then he opened his mother's Bible.

Finally he closed the books, walked to the western window, and looked long at the snow-capped mountains towering in dark magnificence in the moonlight miles away.

"I lift up mine eyes unto the hills, from which cometh my strength," he said slowly to himself. The mountains dissolved. Sampson's eyes were filled with tears.

He sent for Whipton, and finally, wilted and hopeless, Whipton slowly entered the library.

"Whipton," said Sampson slowly, "you cannot be the assistant-cashier of the First National—"

"I deserve it, sir." Whipton's voice was almost inaudible. "I had hopes of repaying it. Here is a check for all I have. I have not spent an unnecessary cent since the day of the—robbery."

The word almost choked him.

Whipton handed Sampson a check for $681.49. Sampson slowly tore it into bits.

"Whipton, I know that sometimes a man is tempted and falls. After he grows older in life, but not necessarily in years, he would give everything but the soul itself to regain what he has lost. Though you once did what you did, you are now an honest man and a brave one.

"I need a man like you—one I can depend on—as confidential clerk and assistant in the Cripple Creek affair. A man who has done what you did an hour ago I can depend on. I can trust him. I want him The world might—probably would—think otherwise; but on such matters the world is a fool, not yet out of the dark ages.

"This check for fifty thousand dollars—it is yours—I give it to you. However, I will make it out to the bank, and cover this last steal"—the boy winced—"of Ellis and Shafter; but between us it will mean it is for your mistake of two years ago. So free your conscience and begin over again."

"No, sir, I cannot," Whipton said despairingly. "It is more than that! I must clear others. I must face my guilt. It is not the money. For another to pay it for me does not clean my soul; and that is more to me than a world of money.

"Peace! Oh, Heaven. Peace! Night and day the word drips on my soul—thief—thief—thief. I dare not die—I cannot live for anything but to clear this stain from me; for my own sake if nothing else.

"At night the stars mock me! Every book makes me a hypocrite; music is torture! Do not rivet this on me! Let me earn it, pay it; confess it to clear others; let me clean my soul!

"My crime has robbed me of nature, books, music, peace, rest, self-respect, home, and fellowship with God and man. I must have these things back! They are more to me than all your millions!

"It is all I have to live for. While I am doing it, I can look men in the eye. I am no longer a thief. Other men have made millions. Why not I make fifty thousand before I die?"

Sampson was perplexed. Speaking like an automaton, he asked for details.

Harsh to himself, Whipton told his story; how he substituted the dummy package; hid the money in a glass jar under a barrel-shaped rock by a laughing trout stream; how he found the jar broken and filled with water, and the money a pulp.

"Have you that pulp?" Sampson's voice was machinery—quick, eager, steady.

"Yes. I have it just as I found it."

"Go get it."

Whipton gazed at Sampson.

"Go get it."

Whipton left the room—and the house.

"Will he come back? I think so," said Sampson to himself as he watched Whipton turn the corner.

"Mr. Swift," announced the servant.

"Swift? Oh, yes. I had forgotten him. Send him in."

"Hallo, Swift. Come in Pleased to see you. Here are your papers. Good evening."

Swift was hustled into and out of Sampson's presence so hurriedly that his ideas were somewhat tangled.

"Warrants for Ellis and Shafter. Ugh! Why didn't the old codger send them down by messenger? I thought I had a case—probably—that fellow Whipton—" and Swift cursed inwardly.

Whipton returned. Sampson was neither surprised nor pleased, for he had confidence in his judgment of human nature. Whipton carefully laid down a package, fell into a chair, and buried his head in his arms on the table.

Sampson carefully unwrapped the bundle. In the broken fruit-jar was wedged a mass of green paper. With a careful blow of a paper-weight Sampson broke the jar. At the sound of the rattling glass Whipton shivered and moaned. Sampson adjusted the lights and took a powerful microscope from the bookcase.

Eagerly he focused it over the green paper. Whipton had not moved. After a long look, Sampson raised his head and looked down at the shaking boy.

"Young man, do you know what this little bunch of green paper is worth?"

"Worth!" he screamed. "Is it worth anything?"

"About forty thousand dollars to you. The government, by use of microscopes and skilled fingers, can separate this into its old form. Of course," with a smile, "the bills will hardly be fit for circulation; but they will charge them to mutilated and worn-out currency and issue new ones in their place—"

Sampson stopped in awe.

Whipton had not heard him. Standing erect, head back, his arms stretched upward, the boy was silently praying. His

face was as radiant as the quiet of the morning coming over the sea.

Sampson quietly left the room, taking the microscope and ruined money with him. Whipton's voice, cheerful, with a new tone, was soon calling him.

Sampson was waiting for the summons. Entering, he said:

"Mr. Whipton, though you once fell, you are an honest man. One fall may kill a tree—a mere vegetable—but not a man. I am willing to give you a new start. This little affair—which we will not speak of after to-night—has taught me more perhaps than you know. With your permission I will send that pulp to Washington, and in due time I will receive forty thousand dollars for it, or nearly so—"

"I must pay the difference with interest."

"You may. Meanwhile I will give the bank a check for forty thousand dollars in the morning, and say that the money has been recovered."

"But about my confess—"

"My boy, brooding over this all the time has made you morbid on the subject. It has distorted your views of the matter. There is no need of confessing. Society is not ready to receive such an act in the proper spirit. It would only ruin you and benefit no one. You must keep it from the public for your mother's sake. Think how it would hurt her memory—"

"Oh! Don't," protested Whipton, his clenched fists raised in agony as he turned away. "You are right."

Sampson held out his hand.

"Forgive me. I won't speak of her again. I will give public assurance that none of the suspected ones are guilty. That will clear others of even suspicion. The trial has cleared you. People would not believe it of you now, even if you tried to make them.

"Now go to bed. You look ten years younger already. Poor fellow, I pity—yet somehow admire—even envy—you. Hurry up and get your strength back. I need a private secretary as soon as possible. That's you!"

Sampson slapped Whipton on the shoulder.

Whipton tried to speak, but his throat refused. He pressed Sampson's hand with both of his and left the room.

"A thief no longer. A man once more," he sang as he went down the hall. His feet twitched to dance. Not until his spirit crosses the Great White Range will Whipton know again the ecstasy he felt that night.

Hour after hour went by. Except for the flames licking in the grate, the room was dark. On a gray-wolf skin before the fire Sampson was lying motionless like an Indian, calmly smoking.

Midnight softly sounded. He arose, leaned against the mantel, laid his pipe on the shelf, and picked up a dried, twisted mass of paper.

"Poor boy, I had to tell him that, otherwise he never would have been happy. But the water ruined you beyond hope," he added, handling the paper. "Forty thousand dollars! Ugh! You're worth about two mills to some ragman. Not the trace of a bill on you."

Balancing it in his hand for a moment, Sampson dropped the green paper into the fire. As he stood looking down and watching it burn he mused:

"This is the best day I have known in thirty years. In life there is something more than money—even for a millionaire."

(The end.)

HOW STEEL CAME INTO USE.

STEEL came into use for industrial purposes through the short-sighted policy of iron-makers who fell into the habit of making their products of such unreliable character that it could not be depended on. Iron had a wonderful hold on popular favor and was only brought into disrepute through the mistaken policy of the makers, who were not satisfied with a fair profit. When Krupp, of Essen, Germany, in 1847, made his first cannon of steel, military engineers ridiculed the metallurgist and protested that soon he would be offering them glass guns. That sentiment extended to all the early attempts to introduce steel for engineering purposes, but ridicule, prejudice, and interest in other material all failed to delay the progress of steel into favor. Some of the early steel-makers were inclined to follow the iron-masters in offering inferior products, unsuitable for high-class purposes, but that inclination was soon checked.

The worst practise tried was to fill orders with Bessemer steel when open-hearth steel was absolutely necessary.—*Railway and Locomotive Engineering.*

Letters of an Old Railroad Man and His Son

By Herman Da Costa

No. 2—Jim Hits a Good Pace, So Dad Helps to Keep the Joints Oiled by Adding a Little Advice on Steam and Nerve.

JIM TO THE OLD MAN.

EAR DAD:

You guessed right, first off. It's a girl, all right, but she hasn't given me her picture yet. When she does I'll send you one, and you can tell me if she isn't the prettiest girl you ever saw from Loudon County

When I told the boss what you wrote about him, he grinned, and seemed tickled. He says you ought to remember about the coal-mine, because you were on the engine that made an omelet out of Bill's eggs. And just the other day, while I was down in the yards, I ran across an old fellow on the engineer's side of the cab who hailed me as I passed.

"You're Bill Britt's son, ain't you?" he asked me

I nodded.

"Tell your dad when you write him that Tom Moore has still got that semaphore."

I was going to ask him to explain, but just then he got the high-ball and went down the line. What did he mean? Maybe you remember. He was grinning when he pulled out.

I got your point, all right, dad. I was a little bit stuck on myself in my last letter, but I couldn't help it. It was a pretty good promotion for me, but the boys soon made me feel that I had to work harder than ever to make good.

The minute a fellow gets stuck up above the bunch on the ground everybody watches him to see what he does, and if he makes a slip he knows sure enough he can't hide it.

The trouble with me, dad, is that I do get a little bit excited once in a while. The only cure for that, I see, is doing things right in order, but what the deuce are you going to do when the order gets upset?

Here, for instance, just the other day there was a call in the office for movement of President Taft's special over our division. Of course, we were handling it through the despatcher's office; but I was to supervise movement, and I was pretty well worked up.

First off, the engine assigned for service got its flues leaking, and when I took an engine off the passenger I ran into the passenger department head first

They didn't like their regular schedule broken, even for the President of the United States, and they said so. But I took it, anyway; then we got a wire that the pilot-engine had run into a washout.

Things began to look bad for the road. We've got a reputation, as you told me long ago, that dates back to 1860, and people keep on reminding us of it, although we lived it down in John Dickerson's time.

Well, we ran an emergency track around the washout—the superintendent fortunately having had a gang working there—but no sooner was that over than we caught up with some fool anarchists who had stacked a ton or so of dynamite to explode the special.

Fortunately the pilot engineer saw the obstruction in time.

But about that time the big boss, the middle boss, and the little boss were calling us on the wire for news, the G. M. was mad as a tomcat soused in water, and yours truly was slightly excited.

Betweenwhiles the passenger department was loudly inquiring when I was going to let them have an engine for that busted schedule, and two newspaper reporters were waiting on the landing, hoping for the worst and making the best of what they had on us.

Deliver me! If it hadn't been for Tom Connolly, who bucked right in and helped me, I'd have derailed that special in another five minutes just to get rid of the worry.

You know, Tom's my C. C. still; I didn't tell you before. He helped me out of the mess by just sitting there, smiling, and dictating telegrams as fast as Rush Moddest, his stenographer, could bang them down.

And Rush himself was a revelation to me. He was even less excited than Tom. He was calmly putting down shorthand in his book with a benevolent confidence in his ability to read it afterward, although there wasn't a vowel or distinguishing mark anywhere.

I went back and hung on the outskirts, but there was no more rebellion when Tom Connolly sat in the game.

Somehow, that little experience has made me feel a bit afraid of myself. You know what I mean, dad; I see there's a whole lot yet I don't know, and I have to swallow and hold my breath for fear I'll beg to be reduced to a job where I don't have to worry.

Don't take that too seriously now; I'm only telling you what passes through my mind, but the job I'm in is bigger than I thought, and I'm eating humble-pie from now on.

Ability be hanged; I'm quick, maybe, to understand, but lots of fellows in the office have more ability than I have, and I believe could do better if they had my chance.

Well, I've got my chance, and I'm going to buck it; if I lose out, it's my fault.

I'm going through a lot of arithmetic that I forgot or never learned, and taking a special night course to make me answer such questions as the one the Old Man asked me the other day:

"How many tons can an engine pull on a two-per-cent grade if the sand's out, just enough coal to last to the top of the hill, and she can't pull more than two hundred tons on the level, firing steady?"

He went away, luckily, before I could answer him. That night I asked an engineer friend of mine the answer, and the next morning I told the Old Man.

He didn't do anything but grin. My answer was right, so what the thunder did he grin at?

Who is Old Man MacArthur, dad?

Affectionately, JIM.

THE OLD MAN TO JIM.

DEAR JIM:

Old Man MacArthur was on the Martinsburg run in my time. He was never known to get excited, except once, and then he really wasn't much excited. But that tale will keep for a while. They tell one story on him that I know is true, having been on the left-hand side when the boiler went up.

We were steaming down Seven-Mile Grade into Harper's Ferry, with a load of hogs, when a runaway string of freights piled up on us.

For a minute or two it rained pigs and squeals and freight-cars. While I was making up my mind where to jump, the boiler went off and blew me out the window into the creek. There I met Mac, sitting in the mud and feeling in the place where his hip-pocket ought to be. As I lit beside him, he turned.

"Well, William, me son," he said, "'tis glad I am to see ye. Have ye no got a plug o' tobacco aboot you?"

Mac always denied this. He said I was excited, and that he didn't ask me for a plug, but wanted a light for his pipe. It may be; I was easily upset in those days.

But, Jim, getting excited when you attend to duty will disqualify you as a railroader.

First off, a railroad man is always attending to somebody else's business. He

can't attend to it right if he's excited; and he's paid to attend to it right, so he can't get excited.

Getting excited at the wrong time is the one big stumbling-block in many a man's career. The exceptional man is the man who takes charge when everybody goes off their heads. He's the man who is recognized afterward, even if he'd always been slow and poky up to that time.

The boss says, "There's a man I can trust; he knows how to do the right thing when the emergency comes."

He remembers what that fellow did while everybody around him was making things worse, and, when the time comes, up goes the cool, calm fellow, and the rest sit around and grumble and cuss him, and wonder where he got the ability to hold his job down.

Seven years ago a great city caught fire Some idiot had discovered a little fire in a basement. Instead of trying to pour a bucket of water over it, he ran out and called up the fire department.

By the time the department arrived explosions began to occur, and the flames shot in chunks on to other buildings. Pretty soon, instead of a little fire, there was one big conflagration.

Down on the corner of the busiest street in the city was a famous old building. It had stood there for forty years, and it housed a corporation that did an immense business with the people of the country.

The flames spread from street to street, and, fanned by a heavy wind that began to blow, threatened this old building. In it were employed several thousand people. It contained valuable papers, expensive office equipment, costly pictures and models of machinery; but of the many thousands employed, none made an effort to remove these things to safety.

They could not conceive that the fire would reach them and burn the building; and, besides, it was fire-proof.

I said none; well, there was one. He was a young clerk in one of the departments, whose duty it was to write letters, make up special reports, and file these letters away. He was an enthusiastic fellow, overfresh sometimes, but a willing worker—one who would rise when his time came.

This clerk went to the head clerk in his department, and suggested that all the files be removed or sent to a place where they would be stored in iron boxes.

His boss sent him back with a short answer.

At first the clerk got angry; then he remembered something that had been told him by an old friend about keeping cool when other people got excited, because that was the time for keeping cool. Instead of letting the matter drop, he very quietly began to save the files of his department in which the correspondence was kept.

He had seen the fire eat up street after street, and dynamite fail to stop it. He figured that he might as well take a chance to save the files. If the fire did not get the building, he could bring them back; and if it did, they were saved.

As soon as the C. C. had gone he paid two of the office-boys fifty cents apiece to watch the files, and he took those files out in boxes to the center of the court-house plaza, where no fire could reach them.

By that time the fire had gotten well down to the building, and others began to act. But there was wild confusion. One man would run out with a waste-paper basket in one hand and a box of pencils in the other; another would appear with a chair under one arm and a blotting pad under the other. There was no order, no directing hand.

Mr. Clerk began to wake up. He thought it over quickly, and remembered that in the office of the president of this great corporation there was a picture which he had been told was worth three thousand dollars. He went up to this office, and told the two negro servants to help him. Then he got on the top of a chair, and cut the canvas out of the frame.

There were four other pictures; each one he cut out, rolled it up, and sent it over to the square where his files were.

Then he reasoned out that if the fire caught the building all that force of people would have to work to-morrow with limited tools; so, remembering how many stenographers there were, he began to go through the offices, picking up typewriters.

Whenever he saw a man idle he told that man to carry out a typewriter to the place in the square.

Then he remembered there were other valuable files. He began to hunt for them, but whenever he met a file clerk he found him so excited that he either did not understand what was asked him or he would rush off without waiting to hear.

So the clerk had to select files at random.

He did the best he could, however, and wherever he took files from a department he would keep those files in one lot. And on desks, where the baskets lay with mail of any kind in them, he took the baskets and mail.

By this time the building had caught fire. Everybody was running out, wildly excited. There were shouts that the firemen were going to dynamite it to stop the conflagration, and loud voices were inquiring if every one had left the place

The clerk went out to see if the report was true. The roof of the building was already burning, and firemen were ordering every one out.

He went down to the first floor. Passing through the passenger agent's office, he saw stacks of tickets on the counter, and, behind the counter, money-drawers open in which were lying silver and bills.

He began to take up the money, but a fireman looked in and told him to get out, so he went out, and the fireman ran on. Thereupon the clerk turned back, went in, took all the money he saw, put it in his hat, and hastened out.

He went over to the center of the plaza, where a great pile of typewriters, papers, and other office equipment was heaped up.

He found a cordon of police around the pile. They would not let him enter until the chief clerk identified him. Then he turned over to the chief clerk the money he had in his hat, and explained what he had done, but the chief clerk was still excited and paid no attention to him except to gasp at the amount of money.

Next day there was a notice in the paper for all employees to report at an old building which had been used for the active operators. Everything was confused. The man who had charge of distributing offices to the newcomers was running around wild. When the clerk finally found his department it was filled with employees from all the others, each one trying to separate from the pile of saved stuff what belonged to him.

The boss of the clerks was up in the air. When he saw the youngster come in he remembered about the money, and thought the boy might be able to straighten this tangle out, too; so he called him over and asked him where his files were in the mess.

Others began asking him where other things were, until finally he was attending to the whole business.

Among those who came up to him was a short, fat man, wearing eye-glasses, who wanted to get some pictures he heard were saved. The clerk remembered cutting them out, and promptly turned over the pictures. In addition, he told the fat man that he had saved four typewriters and some baskets of mail also.

The fat man was tremendously interested. When he got the papers his eyes lightened, and he hurried out with them.

After a while he came back, and asked the boy who had saved the rest of the stuff. Pretty soon he had drawn out the whole story from him, and he went off again.

Then the heads of other departments wanted to know who had thought of saving other things, and always they had to come to the boy.

As it happened, there were not enough typewriters in the city after the fire to permit work being done, so that this boy had saved this corporation not only the expense of replacing them, but expensive delay in handling and answering correspondence and attending to the regular business.

But that wasn't all. It turned out that the fat man was Striver, the assistant to the president, and the papers he had been so glad to get were right-of-way contracts into the largest city in the State. If these had been destroyed they could not have been duplicated on the same terms.

Striver went direct to the president and told him of this clerk saving the pictures and the contracts. He was followed by other heads of departments, who reported how cool this boy had been, and what he had saved the company in money by carrying out files when every one else was excited and doing nothing.

The chief of his own department, in turning over to the proper department the money the clerk had saved, mentioned his name.

What happened? The president of the road took a personal interest in the young man. He sent his name to the general manager for promotion. The general manager was only too glad to promote such a man, and as a result, Jim, you hold the job of chief clerk to the general superintendent.

Yet you come to me now and tell me you got excited merely because a man went over your road in a special!

The things that happened, my son, were the very things you were put there to watch out for and take care of; yet, instead of being prepared for them and filling your job, you let them excite you.

That won't do, Jim. You're up now; you've got a position with men under you, and those men will begin to look to you for help and assistance.

If you can't do any better, bluff. Even if you're shaking to pieces inside and your face is white as milk, put your teeth together, hump your shoulders, and be like Old Man MacArthur.

He said he could only die once, and when he was sure he was dead then was the time to begin worrying about it.

If the men under you know you're excited, they'll get in a panic.

I know it's easy enough to say keep cool at this distance, but if you are calm when you break your pencil, why not be calm when some trains break up out on the line?

One merely makes more noise than the other, and people talk more about it because it's much larger and doesn't happen quite so often.

But the man that keeps cool isn't only to be praised for that. Such a man will use his good judgment at all times. You can depend on him when nothing is about to happen, and you can be sure of him when Hades breaks loose. He's a strong man.

Being able to add up a column of figures is as much a test of coolness as passing between two falling walls without getting hurt. You don't need anything spectacular to test him by. It doesn't need a flourish of trumpets and a marching army to find out he's cool. Most often the ones that aren't cool-headed are the ones that follow the trumpets.

I said MacArthur was excited once. This was in the days when Martinsburg was end o' track for the B. and D.

Mac was on that run at the time, and, as it was early summer, camp-meetings were plentiful along the line.

The road was a pretty easy stretch along there, so Mac usually would tell his fireman to watch out ahead while he would take a little snooze.

A bunch of youngsters used to go out from Martinsburg to a near-by meeting, board Mac's train as it came pulling up the hill, and ride into town with him.

The free riders got so thick finally that the Old Man issued orders for Mac to hit her up when he came along by the camp-meeting, so as to lose 'em. Mac got the order, and the next day when he came over the hill he told the fireman to watch ahead as usual while he took his snooze, but he forgot to say anything about the campers.

He kept on snoozing until he was in the yard limits, when his fireman yelled at him to wake up. Mac woke up, and, hearing somebody yelling, remembered the special order about the campers, and let her out.

Into the yards he went, rattling switches and bumping over ties, the fellows in the yard yelling at him to stop. He was going faster every second, and he finally ended up in the roundhouse.

The fireman crawled from under the coal as Mac climbed down the steps.

"Where you going?" he demanded. "Up-town?"

"Buy me a plug o' tobacco while you're up there, Mac," added the foreman—and the rest crowded around, guying him.

Mac eyed 'em for a second, then shook his head. "Well, boys," he said, "I have been runnin' an engine forty years, but this is the first time I ever saw a turntable in a camp-meetin' grounds."

Jim, you don't need arithmetic to teach you how to boss an office right.

Going to college isn't getting educated; it just rubs off some of the conceit, and makes it easier for the world to educate you when you get out into it.

Don't be afraid of your job. Remember there are always a thousand who are glad to follow you in it and take a chance; but if you're dead sure you're afraid, and know you can't hold it, quit!

There's no failure like the fellow who hangs on when he can't do the work. He's bossed by everybody, including those below him, and he loses his own self-respect.

But I know you're not afraid. If you work hard, you've got to learn; there's no getting away from it. A man can learn anything, if he only plugs at it and doesn't let go. How else do you imagine your boss got to where he was? He made friends, but he made 'em because he plugged along.

There isn't a place in the world that one man's got to, where another man can't get by trying equally hard.

That reminds me of a big stone that used to hang on the edge of Shooter's Hill, looking as if it was ready to fall off. Every time any one passed, he tried to push that stone over, but somehow it still stuck on.

Learned people came along, and estimated that if the height was multiplied by two, crisscrossed by the circumference and a logarithm divided into the result, that you could take a crowbar and heave her over. But she never heaved.

Nigh onto a thousand people must have pushed that stone; then, one day, when a gang of train-robbers, fresh from killing an expressman and two of the train's crew, were down in the hollow, a farmer's little girl happened to be passing, and, of course, had to take a push at the stone.

Over it went on the train-robbers. They never robbed a train again. Seems like it was just made for that special purpose, eh?

Just that one little extra push did the business—and the stone moved. It's just lacking a little extra push that makes so many people failures.

If they'd push once more at Difficulty, it might roll over, and they'd accomplish what they had tried so long; but, instead of making another trial, they get discouraged and quit.

Jim, the proper time to give up is when you're dead. Until then, keep on pushing. When one hand gets tired, try the other; when they both get tired, use your feet; when they get tired, put your back to it, and mebbe by that time your hands will be rested and you can start all over again.

Difficulties are made for strong men—remember that. And being a strong man merely means you won't admit you're weak.

Lord love us! I've run over my schedule. Be good.

Your affectionate FATHER.

(To be continued.)

ARM PLAYED OUT, MR. OPR?

Old-Time Brass Pounder Gives Some Valuable Exercises for "Lost Grip" and "Broken-Down Arms."

BY J. L. MIDDLETON.

VERY few telegraphers who have followed the business any length of time have escaped without being affected with what is commonly known as "lost grip" or "broken-down arms." In rare cases some are affected in such a way as to render them unfit for work, such cases being known as total paralysis. After the arm has reached this stage, little hope can be entertained for recovery

The medical authorities state that the cause of paralysis, "lost grip" and "broken-down arms" is due to the fact that the muscles employed in sending do not receive the amount of nourishment for the amount of energy expended, causing the arm to tire or ache. The reasons are attributed to several causes, the most important of which are the possibility of disease in the body or general debility. Stimulants, such as tobacco, coffee, tea, and liquor, have their effect upon health, and should be indulged in with caution. The medical authorities further state that a proper amount of exercise should be taken which will bring into play most of the muscles of the body.

Electricity has been tried in several ways, but the result has been far from pleasing. Those who advocate electricity, request that the patient be at their office to receive the "scientific" treatment, arguing that when the electricity is applied in the usual manner, the best result cannot be obtained. Possibly this treatment may have done its good work, but a large per cent of the telegraphers still remain who vainly seek relief

After a year and a half of experimenting, I decided upon a system of exercises which is very simple and effective. These exercises can be practised at home or in the office, without leaving your work or in any way interfering with your business. I am well pleased with the result obtained by following the exercises. It has benefited my arm to such an extent that I have very little, if any, trouble with it; but I may add that I still practise them, some days more than others, as the case requires.

This system may seem to be too much trouble, but as a general rule too much trouble means "too lazy," every time

Any one who has studied the muscular system will agree with me that forcing the muscles in the opposite of what they have been accustomed to do when working, will strengthen the muscles in question and those surrounding them.

By imitating the milking of a cow, you will bring into play the muscles used in telegraphing, only they will be forced in the opposite of what they are used in sending. This exercise is performed by placing the index or forefinger to the palm of the hand at the lower joint of the thumb,

then bringing the remaining fingers down in rapid succession.

This may not be an exact imitation, but it is simple; my object is to explain so all will see it alike. The actual milking of a cow is found to be the best illustration, but as only a few telegraphers have the opportunity of milking, I have described the movements as best I could. This exercise alone will not relieve you of paralysis or lost grip, but it is an ultimate relief

Stretching is recognized by man and beast as being the best means of arousing activity of the muscles. Notice dumb brutes after a rest, and you will see them stretch and roll. This will be noticed more especially in dogs, cats, and horses.

When you have been glued to your chair for hours, a good stretch, or a series of them, will liven you up more than anything you can do in so short a time, the reason being, that it forces pure red blood through every artery and vein, casting off the foreign or used-up matter, and replacing it with new tissue.

If this is so beneficial to the other muscles, why not the muscles of the arm? I have found this exercise very satisfactory, but it must be done intelligently

Some telegraphers have very little trouble with their arms, but have formed habits that are about as bad — for the copier — such as making long "threes," "fours," "sixes," "P's," and words like "between," with three or four "e's."

This is partially due to lost control, but mostly due to habit. I have seen men who made perfect letters fall into error after working with men who made such mistakes. This can be nothing but a habit, and may be broken up with a little concentration and will-power

Some men are bothered with sore arms and some with aching arms. I have found that a wet pack applied before retiring gave surprising results. The use of liniments to help the arm are about as useless as rubbing a loaf of bread over your stomach when hungry. The liniment cannot go deeper than the inner skin. It's the inside of your arm, not the outside, that needs attention.

Telegraphers are now resorting to "bugs" and sending machines, and quite a few have made a success of them, while others have made total failures. When you do not use a "bug" regularly you become rusty. A man who does not make good stuff on a "bug" gives the copier more worry than a man with a disabled arm

I do not condemn the sending machine, for I use one myself when I have an unusual amount of business. It saves work.

The men more successful with the sending machines are those who work the heavy wires, as their adjustment usually is correct, and by using them day after day, they keep in practise; but the "bug" man who cannot change from "bug" to arm is as helpless as the man with false teeth; if he loses his teeth, he cannot eat. If the "bug" man loses his "bug," or it is broken, he cannot work. The man at the small office will have better success with his arm than with a "bug" if he only uses it occasionally.

The Postal Telegraph Company recently issued instructions to their wire chiefs and traffic chiefs to see that sending machines had the proper adjustment. This company, I understand, was thinking seriously of throwing them out. The Northern Pacific, I believe, discourages their use.

I am now working at Seligman, Arizona, and there is quite some telegraphing to be done, but I have not had the least bit of trouble. True, I am not so fast as I have been. You can repair an old mill, but it will never be like new, although it will give satisfaction. The same is true of a broken-down arm.

Use your judgment in taking up this course and experiment a little. After you have tried it, I should be pleased to hear from you.

BIG FANS TO VENTILATE TUNNELS.

THE Pennsylvania is installing a large ventilating plant in one of the tunnels under Baltimore. This tunnel is 4,963 feet long, and has a cross-sectional area of 432 square feet. It was determined that it would require 450,000 cubic feet of air per minute. This volume will drive a current of air through the tunnel with a velocity of thirteen miles an hour, and will give a complete air change in four and three-fourths minutes.

Immediately over one of the portals is the fan-room, the floor of which is twenty-three feet above the tracks. In this room are two large electrically driven Sirocco fans, with fan-wheels or impellers twelve and one-half feet in diameter A division-plate divides the breadth of these wheels into two equal sections, and air is received from both sides.

The air is discharged downward into the tunnel through a nozzle which lies close to the roof. The nozzle is flattened and curved to fit the tunnel arch, so that the air comes out in a slit along the arch extending from the springing line at each side. This draws in air from the portal on the principle of an injector.

When a train is moving with the air current, the smoke is driven ahead of the engine; when moving against it, the smoke is blown back over the cab without bothering the engineman.

To discharge the volume of air required and to overcome the frictional resistance of the tunnel, the fan-wheel must revolve at a speed of one hundred and four revolutions a minute, which will require about one hundred and ninety horsepower to drive it.

Honk and Horace

By *Emmet F. Harte*

They Week-End at Woodbine and Take Part in a Foxy Hunt.

AUTUMN is, or has, come again. Honk and I always look forward to the coming of autumn, because of the —er—outdoor sports, don't you know. Both of us are outdoor sports. Honk delights to play checkers in the shade of a tree and to motor when anybody'll take him; and I love to fish and sit in the park and smoke and read the baseball extras.

As a rule, we get all tanned and ruddied up in summer, which is a thing to make a big hit with the One Hundred. A well-done and properly basted coat of light-walnut tan is well-nigh irresistible when cunningly set off by flannels and a yachting-cap. It takes a title to beat it.

We've gone in for outdoor sports this year, all right. Honk joined the Tuckahoe Tennis Club early in the season. He has the whole place littered up with racquets; and he's had several rackets already with different players over teeing his partner's ace, or something.

I do not care for tennis. It is too complicated for me, and too hemmed in in the event of a misunderstanding. I much prefer golf

There's a wide, free, open game for you! And there's class, too, swatting a little white sphere with a two-dollar shinny club and watching it sail over the distant scenery. It's great to have room in accordance with one's strength. I joined the Gristle and Greens Golf Club, and I have already spent many a whacking afternoon on the links.

Honk and I were both invited to become members of the Polo Club. Honk still has the matter under advisement, but I don't think I shall join. Polo is too much like trying to run a horse-race in three different directions at once.

Speaking of horse-races reminds me of riding to hounds. There's a fine, break-neck, outdoor game for you—eh, old chap? My word! Which brings us around to the week-end we spent at the Armitages's country-place, Woodwine, an occurrence that was notable in its way. Just a minute—

Armitage acquired a thousand acres or so of heathery hills and heathy hollows, southwest of the city, last year. I think he traded mining-stock for it, but be that as it may. Soon afterward he cornered broom-corn and swept up something over two millions at one cleaning.

When that happened, naturally, the obsequious thing for him to do was to celebrate. So he built a country-place, thereby putting a crimp in the hauteur of the Fairleighbridges over their new fifty thousand dollar mansion on Chalcedony Drive

Armitage called a special session of dollar-a-second architects, engineers, landscape artists, and castellar experts, and the result was—Woodwine.

I've heard that the various bills, in round numbers, totaled a sum something like the national debt of Peru; but when

the tumult and the shouting died, P. Q. and wife, two daughters, one son, and an innumerable host of supporters, supes, etc., were housed like the Hoorahs of the Himalayas, according to all reports.

They had garages, stables, kennels, coops, corrals, and whatever else is the vogue, regardless of expense—

Is the minute up, Mr. Timekeeper? Good! We're off.

Honk swept into the Medicine House one Tuesday afternoon, hung up his racquet and inspected his forearm where the sunburn was reddest. I knew he was bursting with some kind of news from the fact that he didn't speak up at once; but I continued my razor honing in silence.

"Oh, by the way, Horace," he said presently. "Guess what!"

"Valhalla's bought Spickert from St. Louis to play short," I guessed promptly.

"Nup. We're invited for the week-end at Woodwine, this coming Friday."

"Gracious!" I said. "What'll I wear?"

"Wear your bathing-suit if you like. The weather may be a little bit cool for that, though. Anyway, we'll go out Friday and come back Monday, rested and revivified. They say the Woodwine tennis-courts are the finest west of Tennessee—"

"Friday till Monday, did you say?" I interposed. "Then I'll have to leave Ponto with somebody while we're gone."

Now, Ponto is not one of Honk's hobbies—he's my dog. I bought him a month or so ago from a farmer who failed in business near Valhalla and was on his way back to Illinois.

Ponto cost me fifty cents. He is a full-blooded, liver-colored, Alabama coon-dog, eight months old. He simply lavishes his young affections on me; he won't let me get out of his sight.

Honk he tolerates, and there is no love lost between 'em. Honk don't like Ponto.

"That mongrel!" he sniffed. "Tie a can to its tail or hitch it on behind an outgoing train. What use have we got for a dog, anyhow?"

"I'm figuring on hunting a good deal this fall," I returned firmly. "And he belongs to me, you'll please remember. If I choose to keep him, why, I'll keep him, that's all. You're like the little boy that got his hand fast in the jam-jar—you haven't got a word to say!"

"All right, all right, Horace," he hastened to say. "We can't afford to quarrel over a fifty-cent pup. You know we'll have to whip up and get our work in good shape before Friday. We don't want a thing on our minds to bother about. Armitage's man, James, will call for us with the big Spankhurst car, Friday noon. Have your golf-sticks ready, my boy."

Wednesday and Thursday we buckled to it and accomplished enough work for four men. If the company could have seen that spurt, one of us would have lost his job, that's a cinch. However, they didn't see it.

By Friday we were puffing like porpoises, but we had every book posted, weekly reports finished, balances, statements, expense-bills checked, files up to date, correspondence disposed of—in short, we were nosing the wire. Our helpers had a snap staring them in the face for three days, and no mistake

I took my pup, Ponto, out to Butch Poteet's. Butch's wife, Ernestine, promised to feed and water the dog like a member of the family until I called for him. We incarcerated him in the coal-shed.

Then I hurried back, hustled into my outing togs, packed a bag, and Honk and I tumbled into the tonneau of Armitage's car to be whisked away to the sylvan retreat of the *dolce far nientes* for a brief breathing spell.

Four blocks out on the boulevard, mine ears caught the faint bell-tone of a familiar yelp. I peeked over the bolstered back of the car. It was Ponto. He was making a good showing at a twenty-five-mile-an-hour clip.

"How'd that dog get out, now?" I asked, in a general way. "I locked him in the shed with my own eyes."

Honk took a peck.

"A little faster, James, please," he said. "Give that pup a run for his mon'."

James juggled things with both hands and the Spankhurst emitted a low, humming sound, and—*zip!*

While my hand was clearing three feet of space to get hold of my cap we ran a hundred yards. Honk was the fraction of a second too late. His straw hat got away. We inveigled James's attention by yelling and otherwise addressing him, whereupon he applied the emergency, turned, and motored back.

Ponto came up yammering loud enough to attract people to the windows of houses in the vicinity, for he was proud of having run us to earth. Honk and I descended

from the car; Honk to regain his hat, I to remonstrate with Ponto.

The dog, in the exuberance of his emotion, didn't stop to clean his feet or anything before clambering all over my white trousers. He included Honk in the demonstration, likewise, by frolicking over in time to lick his face when he stooped to pick up his hat.

"Get out, you!" shouted Honk. "Blast the brute!" He kicked and missed

I was annoyed at Ponto myself. I ordered him to go home instantly. He went like Kelly did.

Then Honk and I lost our tempers. Even the impassive James was demurely beguiled by the spectacle of two men shrieking maledictions and throwing rocks at a loose-jointed, careering dog, in a wild endeavor to induce said dog to return whence he came

Honk hit him, finally, by throwing a handful of small stones instead of one large one — a rather unsportsmanlike method — but it served. He fled, ki-yipping, across a lawn and disappeared behind a house. I was impressed with one thing about that dog; he—but maybe you don't care for this sort of thing?

The Armitage villa crowns a low hill, where velvety slopes flow gently in all directions. The house, an example of Italian Renaissance, or Louey the Fourteenth, or some other extra-tut style of architecture, catches the eye from afar. It seemed a well-built, roomy, habitable place, to me, after closer inspection.

James swung in a wide curve between the ivy-covered, red sandstone turrets guarding the gateway, to keep from slicing the gravel, and we bowled along the winding drive that finally fetched up smack under a terminal-shed in the house itself.

Honk and I went into raptures over the grounds. Every tree, shrub, vine, and blossom was exactly in the right place; every hedge, fountain, summer-house, path, and nook perfect. Hail and skoal to that landscape artist, whoever he was!

The Armitages were on hand to welcome us. P. Q., dapper and *debonair;* Mrs. Armitage, a trifle more on the *embonpoint* day by day, and Cynthia and Sybil, the girls. Quincy, the son, was the only member of the family not present.

While I think of it, I'll make mention that the Armitages are the finest bunch of downright folks that I ever knew socially, and if Cynthia wasn't quite so skinny (she's very vivacious), or if Sybil were more vivacious (she's anything but skinny), I don't know but what—but, perhaps you don't care for sentiment in an adventure story.

To resume, then.

The how-d'ye-dos attended to, we were about to plunge into the real business of week ending. One of the supes had already lugged our luggage indoors. Mrs. Armitage was proposing tea in the drawing-room, with P. Q. arguing in favor of something more steadying to the nerves in the library, while the girls were talking golf, tennis, and forty other things at once, when—horrors!

Nemesis arrived.

Up the driveway lumbered the tongue-lolling, dusty, and nondescript figure of Ponto, my unpedigreed pup. He'd been outdistanced, but not outwitted. Not on your Santa Fe trail!

Glad to see me? He forgave everything. All my cold indifference, my stinging reproaches, my rock throwing, my anathemas were overlooked and forgotten—only the fact remained that Ponto and I, his lost love, were reunited.

"Ah—ahem!" said Honk. "A good way to keep that dog of yours at home, Horace, would be to set him in concrete."

"Fie on you, Mr. Simpson," gurgled Cynthia. "Why should he be left at home? Him wanted to come along. Here, doggie; here, doggie! What's his name."

"Ponto," said I proudly. "Just a pup, you know. I haven't had time to train him, as yet."

"He's got points," remarked P. Q. "Virginia foxhound, isn't he?"

Honk made a lightning change from a sneer to a smirk. Virginia is just across the creek from Maryland, where Honk's boasted revolutionary ancestors revoluted in days gone by.

"The man I got him from was a little hazy about his pedigree," I admitted, "but I'm convinced he's got blue blood in him, all right."

Armitage and his daughter Cynthia stood out that Ponto was a Virginia foxhound, which made Honk a stanch admirer of the dog forever. As for me, I didn't care whether they proved the pup a Skye poodle or a Pomeranian bloodhound, so that it was adjusted amicably. I deplore an argument when nothing is involved.

Anyhow, we took Ponto around to the Woodwine kennels to see and be seen by

some of the real blue-bloods of dogdom. Seventy-seven of 'em in all, I think Armitage said; foxhounds, deerhounds, etc., with a sprinkling of setters, pointers, and spaniels; every one registered and biographied in the big dog book, with names such as Narcissus, and Endymion, and Sunny Knight, allee samee like a sleeping-car.

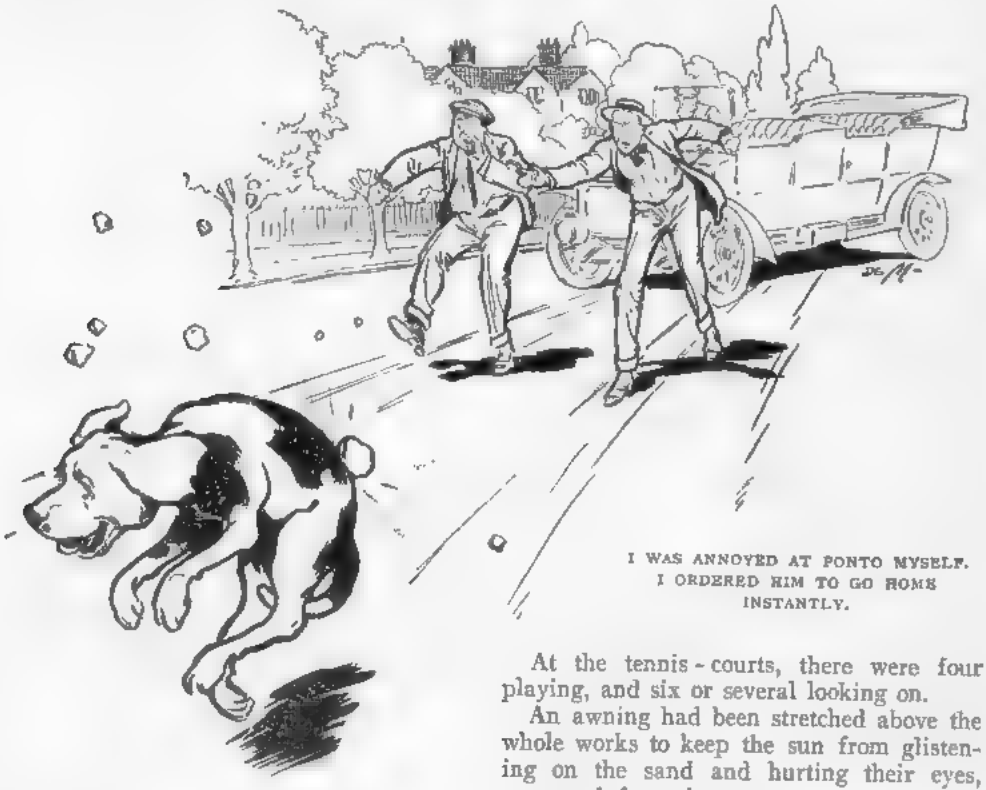
Cynthia knew every one by his own little cognomen, too.

Ponto, being young and light-hearted, we left him to play with a dozen pups of his own age and unaccountability, while we went to cut a few divots on the links.

By the way, I musn't neglect the other guests at Woodwine any longer. I wonder if you had suspected that there were other guests besides us and Ponto? Well, there were.

Four of them were playing bridge in a pavilion a couple of hundred yards west of the house. Clancy Chitwood, Stella Dupont-Skaggs, and Helen Arbuthnot were Valhallaites whom we knew; the fourth rubberer (whistically speaking) was a school pal of young Quincy Armitage, by name, Thomas, or Tom Bigby, from Big Bend, Illinois. He looked it. He was a large, wide young man with dimples and a double chin.

I have no pertinent objection to bridge other than that I don't know how to play it at all. We did not linger longer than was polite.



I WAS ANNOYED AT PONTO MYSELF. I ORDERED HIM TO GO HOME INSTANTLY.

At the tennis-courts, there were four playing, and six or several looking on.

An awning had been stretched above the whole works to keep the sun from glistening on the sand and hurting their eyes, we were informed.

Honk remarked that goggles would shield the eyes, and, at the same time, not deprive them of the wholesome and rejuvenating sunlight, by which he queered himself right at the start. Several said the idea was both absurd and ridiculous.

We were formally introduced, here, to Miss Hyacinth Claggette of Harper's Ferry, Miss Juanita Murphye of Lincoln, Miss Pearl Perkyns of Denver, and the Hon. Hubert Hodge of London, Hengland.

Hubert was a mild-mannered, blondish, and inoffensive sort of a young man who seemed nonplused at everything he saw, but called it either "jolly" or "ripping," just the same.

Honk and Sybil stopped over at the tennis-courts, after which big sister Cynthia

rustled one of the grooms, or some other vassal of the *demesne*, to caddy for us, and she and I hit for the golfing-green in a long lope.

On the links we found Quincy, Jr., and Jessamine Finley, closely attended by a cherubic youngster in the most negligent of negligee costumes, carrying a bow and arrow, pretending to play. They were not, to say, overcome with joy when they saw us, but relaxed enough to challenge us to a clouting match, thereby rushing in where an angel would have thrown up his wings and aviated.

Cynthia Armitage plays golf like the "hoot mon" that invented the game, and a long and parlous experience playing shinny with tin cans when I was a kid has made me little short of a semi-pro myself. So, to summarize the matter in a modest way, we hung their scalps on our laurel-tree while they waited.

I believe I mentioned that Cynthia was vivacious. That's the proper word to use, isn't it, when a young woman whose folks have money is loud-voiced, many-worded, and a regular cut-up?

If Cynthia's immediate family had been worth about five million nine hundred and ninety-nine thousand nine hundred and sixty-six dollars less than they were; she would have been called a blabber-mouthed minx. She was a disciple of Æolus, and no mistake

Now, I don't mind to hear one of the weaker sex do a few stunts with their conversational apparatus—they're good at it, usually, and it's one of their divine prerogatives—but when they don't allow one to finish when he starts to say "yes" or "no," and when they tell you one story after another with a flat point and then outlaugh you to boot, it grates.

When Cynthia got her chattergraph to going good, it was something fierce. Thousands of words, in straights, double combinations, gig-and-saddles, sets, units, and job-lots, gurgled and sloshed from her ruby lips. And when the day was done, and the dazed listener paused to ponder and pick out the dainty little *bon mots* that had showered on him all afternoon, the chances were he'd have a water-haul. Probably Cynthia had not said a thing worth remembering after using up all that language.

She was a strenuous one in other ways, too. She led me at a dog-trot, up hill and down dale. After a three or four hour fling on the links, and a hike across country just for the fun of looking at a spider-legged two-year-old who came from a long line of Kentucky Derby winners, I began to heave at the bellows and to notice how large and heavy my feet were. But, just a minute—

One of the idosyncrasies of the landscape artist who planned Woodwine was a lake; and while water enough for a lake is worth money in the Mystic Hills country, a lake was built, nevertheless.

A fifty-foot concrete dam and two or three artesian wells did the business. Result: a lake of rippling water a mile long and one-fourth of a mile wide. Gasoline launches, sailboats, and rowboats completed the ensemble. I've seen natural lakes not half so well arranged.

Just before I fell in my tracks from exhaustion we struck the lake, and Cynthia must needs take me for a row, as we had half an hour to spare before going in to dress for dinner.

I would have preferred one of the launches, but my fair companion said she loved the very thought of a rowboat, so there was nothing for it but a rowboat.

I pulled, exhibiting my famous 'varsity stroke. She said it was almost heavenly. She also insisted that we go clear to the upper end, where the water-lilies were supposed to be. We did so—against a head wind. But there were no water-lilies yet in sight.

The breeze died down before the return trip, so I had a long, strong pull back; and Cynthia did not for one moment run short of small talk, either going or coming.

"Isn't life grand? How sweet the water smells. Gracious! haven't I monopolized you this afternoon? You don't care, though, now, do you? I do so admire your driving. You made the fourth in two, didn't you? Papa says I'm too lively. I think I'm really reserved. Isn't the air soft and warm? I want you to notice how Pearl Perkyns does her hair, at dinner. It's really cute. I think Mr. Hodge is just delightful. Such an accent, you know. The way he says 'cawn't' is just grand. I've been reading 'The Lady of the Lake.' Isn't it sweet? I wish—and 'Lalla Rookh.' I believe I could write poetry—"

My mind, overtaxed with trying to follow her in this sort of verbose steeplechasing, convulsed and fell into the scrap-heap about this time.

SHE WAS A STRENUOUS ONE IN OTHER WAYS, TOO.

At the landing-steps, I made three attempts before I could persuade my rebellious legs into getting up to accompany us to the house. I don't know of anything that makes me appreciate my work so much as an afternoon of real abandoned play.

Honk had nearly finished his togging up when I staggered into the room and collapsed in a chair.

"Horace," he murmured solicitously, "you look ill, my boy. Is anything the matter? What is it?"

"Nothing," I reassured him. "I've loafed all afternoon until I'm somewhat tuckered out, that's all. Tires me worse to sit around, I do believe, than to be busy. I wonder if I could get hold of a glass of some kind of mild stimulant by any chance—soda pop or sundae? I'm as tired as if I'd been pitching hay. Inertia, you know, mental languor."

"I'll ring," he volunteered. "I wouldn't mind one myself."

A bell-hop appeared almost instantly.

"Brandy and soda," said Honk

"Whisky, lemonade, a glass of port, and —er—a peach and honey, for me," said I, with anticipation.

Half an hour afterward I found that I had dressed in my best with a zest I would not have believed I possessed. Wonderful how one can recuperate in a short time with the assistance of a nervine.

I'll skip the dinner. It always makes me sore to have somebody brag and blow about a dinner they've been to, and all the good things they've had to eat. No doubt, you're the same way.

I'll say this: The meals at Woodwine filled the bill. For details see the menu of any first-class summer hotel.

Over the smokes the most discussed topic was a fox-hunt on the morrow. Everybody talked fox-hunt whether they knew anything about a fox or a hunt, or not.

I propounded several questions, mainly for my own information, having never fox-hunted so you could notice it. Did they go far? Was it to be on foot? Were guns used? If so, what kind? And were foxes plentiful?

Did the thing require any severe special training, skill, forethought, calculation, or sagacity? If not, why? If so, wherefore? Naturally, as a self-confessed tyro at the royal sport of coursing, I became at once

the center of a gesticulating group of spell binders, who sought to explain the whole scheme in as many words as possible. Even the Honorable Hubert tapped me on the shoulder.

"It's—ah—ripping spawt, y' know, old chap," he said trenchantly. "Ripping."

So much for that. One moment while I change reels, please.

Honk is eternally bombasting about the marvelous effects of a night's sleep in the country. He goes on about how you knit up the raveled sleeve of care, while drinking in ozone sleeping by an open window, while the scented zephyrs from the moonlit knolls trickle in and whisper little lullabies in your ear.

He says it's better than a bath in the fountain of youth itself, and all that sort of bunk.

In the first place, that bunch of owls at Woodwine played cards, and guitars, and mandolins, and ring-around-the-rosy on the lawn until midnight. Then it took another hour for the horns of elf-land to quit blowing, then the dogs set up a steady yap-yap for the night.

I dozed off about four o'clock and took a perfectly sweet little nap. I must have slept all of an hour when pandemonium began to break loose around the edges, heralding the first peep of dewy dawn.

Chickens bellowing, pigs lowing, horses squealing, sad-eyed kine neighing, and the pack of dogs all chipping chunks from the welkin, made an uproar you'd want to hear once, and then back to milk-wagons and five-o'clock whistles for yours!

Honk twitched and wheezed a few minutes, then awoke with a start.

"What's that din?" he asked. "Has anything happened?"

"Din?" I said. "I dinna hear any din. Those noises are Armitage's registered Jerseys and Holsteins; his Polands, Berkshires, Orpingtons, and Brahmas; his Hambletonians, English hunters, etc., accompanied by several score of high-bred canine yelps, to sort of give body to the chorus. Isn't it ripping?"

"Huh!" he said. "They ought to be muffled. The idea of blaring out like that at this unearthly hour! What time is it?"

"Five-thirty," I announced, after consulting the regulator. "I'm getting up."

We were short a few ladies at breakfast, but all the men were on hand. To be on the safe side, I stowed away enough to tide me over in case the excitement of the forthcoming hunt caused us to lose out on luncheon.

Breakfast over, a great hullabaloo ensued. Armitage, Sr., skipped about like an educated flea, trying to see that the preliminaries were all properly attended to; flunkies were hurrying hither and yon; mounts were being saddled and led out; in the kennels the dogs were kiyiing, and there was the cackling of fair women and the chuckles of brave men.

Early in the row, I got young Quincy Armitage to one side and negotiated the loan of some riding-togs. He and I are about of a length, though I may be just a trifle more circumferential; his feet are bigger than mine anyhow.

He fitted me out with a pair of stunning peg-tops, with tall, modish boots to match. I showed up very "on wriggle."

Honk suffered by comparison. He wore his tennis rig, and an automobile cap. I thought he looked rather—er—provincial.

The fox-cage was brought out and his bushy-tailed slyness loosed. The animal was to have half an hour's start, somebody told me. I thought that little enough; still, half an hour is quite a spell if the fox gets a move on.

As I said before, I am not versed in all the finesse of the chase; my early hunting education was more or less neglected, but I'm apt and observing. I mounted my nag and held the reins in my left hand, same as the rest. Then they let out the pack, somebody tooted a horn, and away we went, lickety-cut.

The horse I occupied had a gait like a switch-engine with three flat wheels. I tried several styles of riding before I got one that would keep my back teeth from jarring loose.

Honk was riding with Miss Perkyns. I noted that he affected the bobbing style of riding, but he bobbed too fast. Every so often he came down as his horse went up, which looked awkward, to say the least.

I saw only one real classy bobber in the crowd, and that was the Hon. Hubert Hodge. He was in the air all the time.

The pack streamed down a long slope, with hedges and fences crisscrossing it, and the riders galloped in pursuit. When we struck a fence or hedge, some leaped over and some crashed through.

Old Stifflegs, I was riding, was a combination animal; he jumped with his front

end and crashed through with the rest of him.

I did all kinds of assorted and fancy riding at these times, not confining myself to the saddle, wholly.

I rode on his neck or haunches—all over him, in fact—but most of the time I managed to keep my feet in the stirrups.

I DID ALL KINDS OF ASSORTED AND FANCY RIDING.

At the bottom of each slope was a ravine. These we took at a bound, or else, like the Egyptians crossed the Red Sea, by fording.

Once I saw Cynthia Armitage race up to a ditch, for a prodigious leap, with her hair slipping off sidewise, hat and all. At the brink her mount decided not to jump, but didn't tell her in time, so she kept right on with her part of it. Clancy Chitwood, who was master of the hunt, snaked her out, tousled, but unhurt.

Many of the ravines that the others made in one jump, I made in two. The Honorable Hubert felicitated me twice on my not coming a "beastly cropper," whatever that was

But the pace was too fast for my nag. Every time he fell down we lost time; so they all went on and left me. I heard Clancy's bugle tooting away off to the right and the yap-yap of the pack growing fainter.

I veered a little, hoping to intercept them if they happened to circle. I intercepted Tom Bigby, by the way, making a sneak for the house. He was all in.

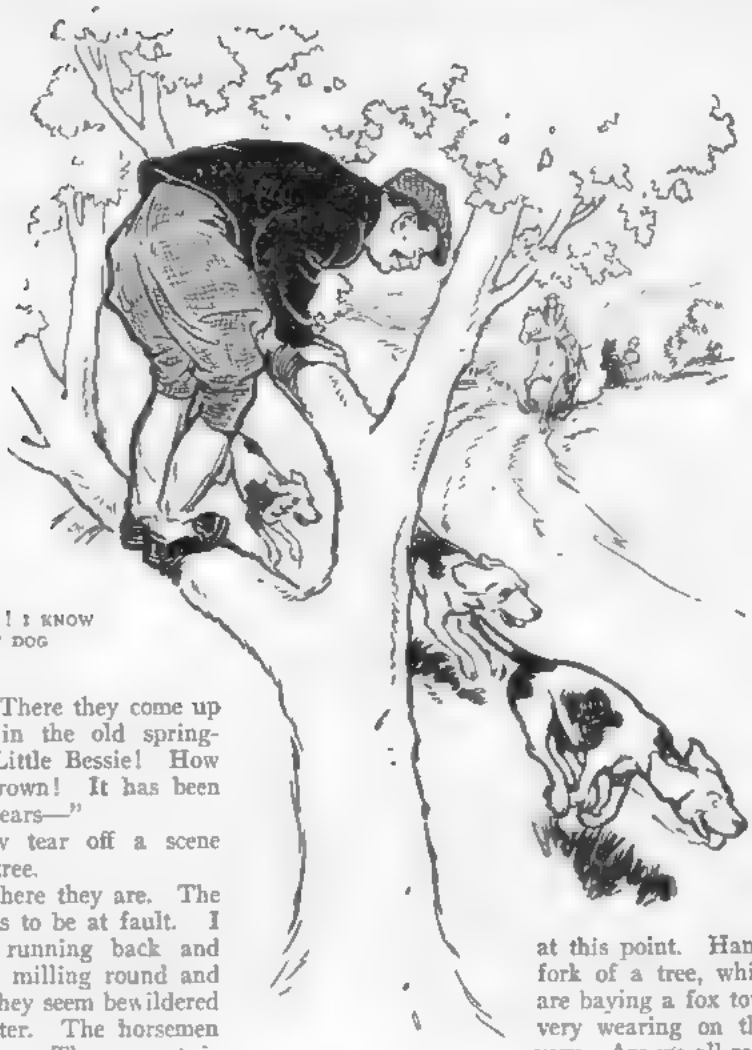
"Whew!" he whistled. "Where are they all? My horse stubbed his toe back there, and I think I bent a couple of ribs when I struck. I believe I'll be able to see 'em from the top of the hill over there."

"Wigwag me, if you do," I told him. "I'll hold my Pegasus here in readiness."

Bigby waved his hand in a general semicircular, westerly direction as he went over the ridge. I rode toward the right field, as indicated. I knew I couldn't catch 'em—didn't particularly care to, anyhow.

So I rode around the brow of the hill, dismounted, tethered Old Stifflegs to a mesquit bush, and climbed a scraggly tree to reconnoiter.

Remember how Stormy Barnes, in his great emotional scene, peers through the muslin window painted on the back drop—at the stage hands matching nickels to see who buys next—and says:



BY JOVE! I KNOW THAT DOG

"Ah! There they come up the road in the old spring-wagon! Little Bessie! How she has grown! It has been ten long years—"

I'll now tear off a scene from my tree.

Ah! There they are. The pack seems to be at fault. I see them running back and forth, and milling round and round. They seem bewildered—they falter. The horsemen are gaining. The nearest is either P. Q. Armitage or Clancy Chitwood. No, it is Honk. The others are coming over the hill.

Aha! The dogs are on the scent again. Order materializes out of chaos. Gone away! They're on—I mean, off—in full cry. Whip up, Clancy—no, that's Jessamine Finley. There goes Miss Murphye's hat. Some of the dogs run back. They want to go the other way. See how they straggle to one side. But, no! The leader does not hesitate! The rest follow at last!

Hooray! They're coming this way. Straight along the ravine! Great Nimrod! What's that? A fleeting brown shape—the fox! Wow! Wow! The view-halloo! It was I that saw him. I—

We'll say that I stopped to take a chew at this point. Hanging in the fork of a tree, while the dogs are baying a fox toward you is very wearing on the nerves—very. Are we all ready?

Here they come! The pack is gaining. The quarry is weakening, but he makes one last hopeless spurt. The chase has almost reached me. The dogs, in a solid phalanx, are rushing, red-mouthed, toward me. It's magnificent. See them, centered by instinct and training, hurling their bodies, each a living missile that cost many dollars, relentlessly on the trail of the quarry!

Nothing can divert them. To follow the fox is their heritage. They are born to it. One dog—the leader—has maintained his place, a length ahead of the others. His face looks familiar. Also that long-legged, careering stride.

By Jove! I know that dog! It's Ponto! How did he—but he did it, however, he did it! And he's leading the pack! My

dog Ponto! Aha! Little long-eared brother, it's all day with you now. Your race is run!

See! The valiant Ponto leaps upon the quarry, at my very feet! Hear the deafening chorus of the pack at his heels—a cloud of dust, and—

I scrambled down out of the tree and kicked the yelping dogs from the quivering carcass.

Along the valley and down the hillsides raced the hunters. Singly, and by twos and threes, they galloped in, and surrounded me.

There was the sound of chatter and comment. Then, solemnly, I held aloft the chewed remains of the quarry for all the hunters to see.

It was my trophy, by the rules. I'd been in at the death, and, besides, *my* dog had caught it!

It was a fine, full-grown jack-rabbit, fairly taken in the open with all outdoors to run in, which I consider a far-and-away finer piece of work than bagging a lumbering fox.

However, the Honorable Hubert called the whole hunt "a beastly fluke."

"LOOK OUT FOR THE LOCOMOTIVE!"

Mystery of an Old Warning at the Crossing of an Abandoned Railroad in Sight of New York City.

BY FRANK H. BROOKS.

NEVER shall I forget an incident that happened in New Jersey sixteen years ago, when I found an abandoned railroad

It was late one afternoon in the season when the purple splendor of the hills betokens the near approach of nights when the frost visits the "punkin." A log by the side of the road affording a seat, I lingered to rest. As I did so, I saw this weather-beaten, shot-riddled sign-board at the crossing

LOOK OUT FOR THE LOCOMOTIVE!

One sees that sign but seldom in these days It belongs to the ivy and cobweb age. As I ruminated, trying to recall the first time I ever saw such a warning, a stranger shambled near by. The lonesome feeling was on me, otherwise I might not have recorded this dialogue

"What railroad crosses here?" I asked

"There ain't any," the stranger replied

"Then what does that sign mean?"

Anything for an argument when a fellow feels lonesome!

"It doesn't mean anything now," he answered

"Are there no trains on this road?"

"Hain't been any trains 'long here for—I don't remember when"

"What was the name of the road?"

"I can't just remember that," he said after some hesitation.

"Well, between what points did the road or the trains run?"

"That was just the trouble. They didn't run. That was what kicked up the rumpus."

"Did they try to run?" I asked.

"Sometimes. But you couldn't blame the company. Say, sometimes there wouldn't be a passenger all day"

"Well, when the trains did run, or when they tried to run, between what two points did they get in action?"

"You just never could tell. Sometimes a train would start from t'other end of the line to come up to this end, and maybe it wouldn't get halfway before something would happen and it would have to go back. I never could see just what they wanted to put up that sign for. No locomotive could have gone within a mile of here without being seen. The people along here were looking for a locomotive all the time. Why, they were looking for locomotives in their sleep even."

"From what point or points did the train or trains start?"

In my early days I was a sort of a lawyer, and I hadn't forgotten the force of cross-examination

"Which one of them?" asked the stranger, "'cause if a train come clear through from where it started from, then coming back it started from where it went to, didn't it?"

I had to shift my tactics. I drew a line in the dust with my cane and pointing to one end of the line, I said:

"Now this line represents the road. What is the name of the town at this end?"

"But that ain't this road. This road is crookeder than a string of zigzag lightning, and the road that you make is straight."

"Taking it for granted that this line I have made, which we will call a railroad—taking it for granted that it is crooked—what town is this at the end of the line, the south end of the line?" was my next question.

The stranger gazed quizzically at my drawing

"Well," he said, "taking it for granted, as you say, that this here line is the railroad, and that it's crooked, and taking it for granted that where you are pointing to is the south end of the road, that town would be Hoboken."

"Good. Now then, what town would this be—at the north end of the line?"

"But the town at t'other end ain't north from Hoboken—not just due north as the robin flies."

"No matter about the direction, my friend What is the name of the town at this other end of the line?"

"Why, that's Kitesville"

"How do you spell it?"

"C-o-y-t-e-s-v i-l-l-e"

"That spells Coytesville."

"Well, it's Kitesville up here. Been Kitesville even since I've lived here—going on twenty-seven years."

"Then the road must have been the Kitesville and Hoboken Railroad."

"Not necessarily. Might have been the Hoboken and Kitesville, for all I know."

"How far is it to Hoboken?"

"By this line?"

"Yes; but you say there are no trains on this line"

"That's so; not any railroad trains, but there is a trolley"

"How often does it run?"

"Depends. If there ain't nothing the matter with it, it runs every hour."

"Taking it for granted that there is nothing the matter to-day, when will the next car be along?"

"Going which way?"

"To Hoboken"

"'Bout an hour—just about, I should say."

"How far is it to Hoboken?"

"'Bout eight miles—just about, I should say."

"How far is it to Coytesville?"

"'Bout a mile—just a mile"

"How long before there will be a car from Coytesville?"

"You mean Kitesville?"

"Yes, whatever you please to call it."

"Well, mister, there won't be no car from Kitesville until the car that comes up from Hoboken gets there and comes back."

"Only one car on the line, eh?"

"That ain't always on. She's off her trolley 'bout half the time. If you be going to Kitesville, though, you'd better walk along the track. It's only a mile, and there ain't no other town 'tween here and there, so you'll know when you get to Kitesville."

"Thank you; but suppose I don't want to go to Kitesville, then what?"

"You mean s'posing you want to go to Hoboken?"

"Well, yes, to please you."

"Well, in that case, you know best what you want to do. I wouldn't like to undertake to tell anybody, 'specially a stranger, just exactly what he ought to do if he wants to go to Hoboken by this line."

The sun was beginning to set, but still my mind was on that old sign. The mystery had not been cleared

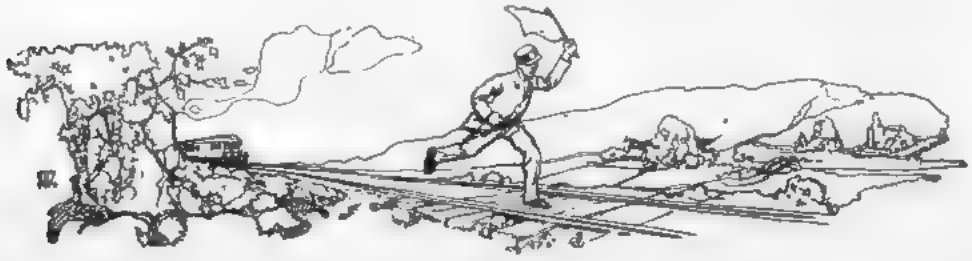
"Now, going back," I said to my friend, "if the railroad between Hoboken and Kitesville has been abandoned, why don't they take down that sign about locomotives?"

"Oh, well, it don't hurt anybody, up there You don't have to look at it if you don't want to. There's no law in New Jersey compelling a man to look out for a locomotive; but if you really want to know my opinion, the folks over here like strangers to think they're enterprising. That sign gives the impression that we have railroads in our midst—and that makes land worth that much more. If you are looking for land, I can give you a dicker."

It was a curious thing to find an abandoned railroad within hearing of the thunder and within sight of the water-front of the great city of New York.

And unto this day, traffic has never been resumed along the route.

So much for the trolley.



DARED DEATH IN THE CAB.

Heroic Engineers Faced Fearful Fate To Save Trains.

Devoted to Duty, They Stuck to the Throttle and Rode on the Edge of Eternity With Human Life Hanging in the Balance.

BY CHARLES FREDERICK CARTER.

FORESIGHT could not have averted the accident which overtook the fast mail train of the Chicago and Northwestern Railroad on the night of January 5, 1907.

Being behind time, L H Shull, the engineer, was driving his locomotive at a terrific speed. As he neared Belle Plain, Iowa, two boiler-studs blew out With a pressure of two hundred and ten pounds behind it the steam instantly filled the cab. Shull and his fireman were terribly scalded, yet the engineer tried vainly to close the throttle and apply the air-brakes.

While Shull was trying to stop the engine Belle Plain was passed, and the fast mail thundered on toward an interlocking point a few miles away It was absolutely necessary to stop before this point was reached.

Shull, groping blindly, found the fireman's coal hammer. Then he clambered over the coal and the back of the tank, littered with slash-bars, ash hoes, rerailing-frogs, extra scoops, and lumps of coal, to the door of the express-car.

"Let me in!" yelled Shull, pounding on the door with the hammer

"Get away from there, or I'll fill you full of lead," replied the express-messenger, believing he had been attacked by robbers

There was no time for parley, so Shull paid no heed to the threats, and with a few blows smashed down the door Providentially, the express-messenger withheld his fire until he could see his assailant

Recognizing the engineer, he lowered his revolver and allowed him to enter.

Shull had just enough strength left to climb over the piles of freight to the conductor's valve and apply the brakes.

Shull spent the next month in a hospital recovering from his burns Not long afterward President Marvin Hughitt, at an official banquet arranged in his honor, made a laudatory speech and presented him a gold watch bearing an inscription:

> TO L. H. SHULL
> For His Fidelity to Duty
> January 5, 1907

Without an instant's hesitation, John Riley, an engineer on the Pennsylvania

Railroad, ventured his life against tremendous odds merely to save the company's property.

Riley was sitting in the cab of his engine, which was standing on the main line at Altoona, on May 2, 1901, when a highly excited operator rushed up waving his arms.

"Get in on a siding! Get in on a siding, quick!" he shouted. "There's a runaway coming down the mountain. Fifty-eight cars. Hurry!"

Riley grasped the throttle.

"Get off!" he said to his fireman.

The fireman made no move to obey.

"Get out of here, or I'll break your fool head," roared Riley, menacing his mate with a hammer.

Locomotive Held the Runaway.

The fireman turned quickly and leaped from the gangway as the engine gathered speed.

Riley sped up the mountain, keeping a sharp lookout for the runaway train. When he saw it coming he stopped and started back.

By skilful jockeying he allowed his engine and the runaway to come together while going at nearly the same speed. Then he reversed and applied the air-brakes.

His big locomotive ground her wheels and held the train back with all her power.

Riley did not expect to stop the runaway. He was trying to mitigate, not to prevent, a disaster.

The train rushed into Altoona at high speed, pushing the stubborn locomotive before it. Two other engines were in the way. These engines and Riley's were partly wrecked. The damage was slight compared with what it would have been.

Such conspicuous bravery was not permitted to pass unnoticed. The board of directors sent Riley a gold watch worth a thousand dollars, bearing an inscription reciting that it was presented in recognition of his "courage, judgment, and high sense of duty." Accompanying the watch was a check for five hundred dollars.

A strongly grounded superstition of the railroad man is that accidents always go in threes. It must be confessed that this belief is fulfilled by events with remarkable frequency. It is no less remarkable that, no matter how strange and unusual an accident may be, it is often followed by two others of the same character.

On the day that Riley received his reward for devotion to duty the board of directors also sent to Engineer William Black and Conductor James Lundy two checks for two hundred dollars each, in recognition of an act of bravery performed two months before. They had voluntarily started in pursuit of a runaway train, had overtaken it while running at a terrific speed, had coupled to it, and gradually brought it to a stop.

Some time before this incident an engineer and fireman left their engine to look at a wreck. While they were gone their engine ran away and dashed into Altoona at twenty-five miles an hour.

Henry Cresswell, a switchman, saw it coming, and resolved to capture it. Only an expert can board a caboose running at half the speed at which the runaway was traveling. Owing to the arrangement of steps and hand-holds, it is much more difficult to board an engine in motion than a caboose. A false step would have meant almost certain death under the wheel.

Warily watching his chance, Cresswell made a leap as the engine sped past.

He succeeded in grasping the hand-holds, though his arms were almost wrenched from their sockets. His body swung back sharply and his heels cracked together. His arms were benumbed, and for a moment they were useless.

Wit as Necessary as Heroism.

He was dragged some distance before he could place his feet upon the steps and pull himself up.

Once in the cab, he was soon able to stop the runaway and prevent what otherwise might have been a costly wreck. It was such a notable feat that General Superintendent Sheppard sent him a complimentary letter, with which was enclosed a check for fifty dollars.

When an accident occurs on a railroad there is usually a clamorous demand to know who made the mistake. Mishaps frequently happen through no human error.

A string of seventy-two cars broke loose from an engine on December 24, 1908, and started down a steep grade on the Buffalo and Susquehanna. They approached Addison, New York, at such high speed that they left the rails at a curve and dashed into the small station, reducing it to ruins. Then they heaped themselves upon a creamery,

demolishing it. A fire soon broke out, and not only were the remains of buildings and cars burned, but several coaches standing on a siding were also consumed.

Courage will sometimes point the way out of a difficulty, but when the unexpected arises heroism alone is not sufficient; quick wit must play a prominent part.

Trains Came Together Without Damage.

Many persons undoubtedly owe their lives to Engineer Pierce D. Marsh's ready resourcefulness. Marsh's engine was pulling a Chesapeake and Ohio passenger-train up a heavy grade near Jane Lew, West Virginia, on June 25, 1907, when he saw a string of runaway cars coming down the hill at forty-five miles an hour. They were only three-quarters of a mile away.

As their speed was increasing with every turn of the wheels, Marsh had less than sixty seconds in which to comprehend the situation and act.

With one hand he closed the throttle. With the other he jerked the lever of the brake-valve to emergency position. The heavy train quickly came to a stop.

Seizing the reverse-lever with both hands, Marsh pulled it over into the back-motion; then, releasing the brakes with his right hand, he opened the throttle with his left, giving the engines all the steam they would take without slipping the drivers. The train almost leaped from the rails in the suddenness of the start down-hill.

Marsh had not a moment to spare, for the runaways were less than four hundred yards away when the train began to move.

The runaways gained so rapidly that a fatal collision seemed inevitable, but Marsh coaxed his engine to greater efforts, while his fireman stood in the gangway with bulging eyes watching the approaching cars.

Halted Runaway at Bottom of Grade.

The space that separated the trains became less every second, but the speed of the retreating train gradually increased. Soon it was backing down the mountain at fifty miles an hour, with the runaways pursuing it at fifty-six miles an hour. The two came together without violent impact after the train had backed 2,250 feet.

Again Marsh applied the brakes to the limit of their power. None too soon, for the speed on that tortuous road was becoming dangerous. Gradually the speed slackened, but not until the bottom of the grade was reached did the thrilling race end.

Wildly excited passengers clambered from the cars, hurling questions at the trainmen and curious to view the results of the collision. The damage was slight.

The incident came to the notice of the trustees of the Carnegie Hero Fund, and Marsh was awarded a silver medal and one thousand dollars in cash.

Quick wit in an emergency saved a train-load of passengers on the Central Railroad of New Jersey on April 24, 1909. Percy R. Wooley was firing a Mother Hubbard, a type of loc motive on which the engineer's cab is perched over the center of the boiler, while the fireman's is at the rear of the sprawling Wootten fire-box. This arrangement places the engineer at the middle of the locomotive and the fireman at the end. A running board barely six inches wide is their only means of communication.

The train was approaching Hamilton, New Jersey, at sixty miles an hour, when Wooley heard a terrific clatter on the right side of the engine.

Side of Cab Collapsed.

Peering around the edge of his windshield he saw a cloud of dust, steam, and splinters. In the midst of it was Fred De Groff, the engineer, pale and evidently fainting, clinging to the rear door-frame of the cab in a position which indicated that his legs were useless. As Wooley looked the side of the cab fell from the engine, carrying De Groff with it.

Wooley knew that the side-rod had broken. The side-rod is the steel beam connecting the front and rear drivers, through which power applied from the piston through the main-rod to the wrist-pin on the forward driver is transmitted to the rear.

This steel beam had snapped in two and the loose ends, whirling like steel flails, were smashing everything with which they came in contact. Not only was the locomotive "stripping herself," but Wooley knew that the stripping process was likely at any instant to plunge the train into the ditch. Something had to be done quickly.

It was impossible to reach the throttle and brake-valve, for the right side of the cab was gone. The levers could not be

reached from the left side, because the boiler extended to the cab-roof. The locomotive was one of the largest used on the road.

Broke Coupling with One Hand.

Wooley grasped every detail of the situation at a glance, and turned quickly to do the only possible thing.

The crash of snapping steel and a roar of escaping steam told him that an injector check-valve had been battered away, and spurred him to greater efforts as he climbed over the coal in the tender. Down the ladder on the back of the tank he climbed to a little step a few inches above the rail with which all Jersey Central locomotives are equipped.

Grasping the hand-hold with his right hand, he reached down with his left and seized the air-brake hose.

Air-hose couplings are so made that the two ends can be parted by a lift and twist with both hands. Sometimes a brakeman will part the couplings with his foot by throwing his weight upon it. This is not difficult when cars are standing in the yards, but to uncouple a hose with one hand while a train is running sixty miles an hour is a precarious task.

Wooley threw every ounce of strength into the effort and the hose parted. The end he held straightened so suddenly as the air escaped at a pressure of one hundred and ten pounds to the square inch that it almost threw him under the wheels. The flight of the air in the train-pipe set every brake, and in a few seconds the train came to a standstill.

Men hurried back to look for the engineer. He was found in a dying condition. A messenger was hurried to the nearest telegraph-station for assistance.

Wooley, who is now an engineer, wears a costly gold watch, which was presented to him by the general manager as an appreciation of his presence of mind and quick action.

Devotion to duty under different circumstances was shown by Edward Irish, an engineer on the Wabash.

Irish's engine was hauling the Continental Limited on the night of January 12, 1903. The temperature was several degrees below zero. At Lafayette, Indiana, something went wrong with the engine, and Irish was obliged to crawl under it to make repairs. He crouched for a long time on the icy track and worked with bare hands. When he came out both hands and feet were frozen.

In that condition he ran his engine to Danville, Illinois, and overcame thirty minutes of lost time. His feet and hands were so badly frozen it was feared for a time that they would have to be amputated.

Handling a burning car known to be loaded with high explosives demands unusual courage, yet there have been numerous instances in which railroad men have dared death in this appalling form to prevent a disaster.

The roof of a car in an east-bound Panhandle train caught fire at South Charleston, Ohio, on June 21, 1905. This car contained twelve thousand pounds of giant powder. It was so labeled, and when the villagers hurried to the scene to form a bucket-brigade they were afraid to venture near it.

Towerman Lafe Holdren realized that unless something was done quickly a large amount of property would be destroyed, and probably lives would be lost. Arming himself with a hand fire-extinguisher, he hurried to the car and climbed to the roof. By dint of vigorous kicking and stamping, and by an occasional squirt of the extinguisher, he conquered the fire.

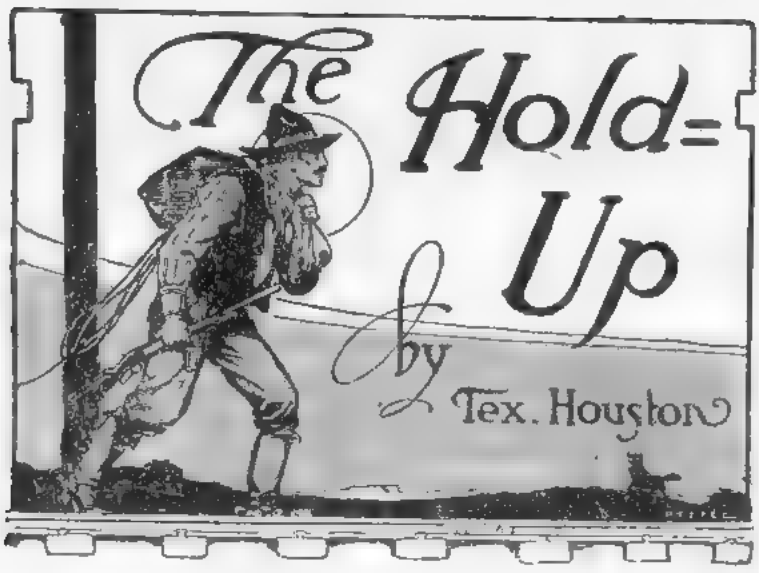
No one witnessed his heroism, for villagers and trainmen had stampeded.

Even this deed was outdone when, on July 4, 1903, a car of powder in a Baltimore and Ohio train on the Ohio division was found to be burning. Instantly apprehending the impossibility of extinguishing the fire because of lack of adequate means, Engineer G. A. Duval determined to attempt to confine the damage to a minimum.

Saved Town from Explosion.

Disregarding the extreme danger should a spark reach the powder—before the Bureau of Explosives was organized there invariably were broken kegs in every large shipment—Duval ordered the head brakeman to uncouple the blazing car.

The moment a flourish of the brakeman's hand indicated that this was done, Duval opened the throttle and sped down the line until he was at a safe distance from other cars or buildings. Here he stopped, while the brakeman cut off the car, then he sped from danger and awaited the explosion.



BIG BOB, general manager of the Gingerbread Mine, shifted his two hundred and fifty pounds of muscle in his big easy chair, hunted with his toes for the disreputable pair of fifteen-cent carpet slippers gone astray somewhere on the carpet, laid down his book, and looked at his assistant stretched at ease on the bed.

"What you reading, Grey?" the big man asked.

"Chemistry. Got a match?" drawled Grey. "What you reading?"

"Grey," remarked Big Bob as he held out the light-stick, "you will stuff your head so full of acid some of these days that you'll pickle those sweetbreads that you so fondly think are brains. Why don't you read something alive—like 'The Gold Bug,' here? Great story. Poe *can* write."

"Y e-e-s!" mused Grey "Poe is sure a great writer. Makes three men pack over a ton of gold—that's fully seven hundred pounds apiece—on their shoulders through the night for some miles, after doing enough digging to keep a dozen laborers busy for two days. These three wonderful men of Poe's mind do it all in a few hours. Now, the science of it all—" and the lazy figure paused to light his cigarette.

Big Bob hastily began to examine his treasured copy of "The Gold Bug," highly scandalized that any one, even his assistant, who was a shark on mathematics, should cast doubt on Poe's logic.

After figuring a few moments on the margin of the local newspaper, Big Bob slowly stuffed the small book back into his pocket, and asked:

"But what good does all this chemistry, physics, and mathematics and other highbrow scientific junk you're always poring over do when it comes to getting ten thousand dollars in good long green over Berthoud Pass to clean up the pay-roll of the Gingerbread to-morrow?

"Our esteemed friend, Three-Finger Musgrove, is liable to poke a shotgun into our faces and request the loan of the bundle for an indefinite period for purposes of his own. Then what?"

It was Saturday afternoon, and Big Bob had drawn the money from the bank that forenoon, as the banks closed at noon till Monday.

He had come across Berthoud Pass in a light buggy two days before to attend to various affairs connected with the Gingerbread Mine on the other side of Berthoud Pass in Middle Park, and especially to get the money for the pay-roll

He had brought along his assistant, a nervous, gray-haired, restless chap, with a mental make-up that resembled a pawnshop window, so varied and apparently inconsistent were the ideas that at times originated under his grizzly, bushy scalp.

Three-Finger Musgrove, one of the most noted and dangerous hold-ups in the Rockies, was said to have been seen that week

in Empire, Colorado, and the two mining men were far from easy about getting that pay-roll over Berthoud Pass in safety.

Still, they could not well go parading out of town, over the Pass and down into the Park, with an armed escort, for fear of ridicule, for Musgrove was at best only a rumor.

So Big Bob had decided to risk taking the money to the mine, guarded only by himself and his assistant.

"If you'll look up the history of the semicolon, Robert, you'll find that it did not come into use till after Captain Kidd was dead," continued Grey, on the bed. "Also, that certain salts, usually those associated with silver, are affected by light, especially when passed through a lens."

"Grey," growled the big man, "if you don't stop raving I'll have to tie you, hand and foot, till the doctor comes. What's all that tommyrot got to do with our pay-roll and Three-Finger?"

"As I was saying," continued Bob's assistant, unabashed, "while you are ascertaining the fact that if any sea-captain should run his lines as Poe does to locate that tree with the skull in it, that said sea-captain would hang his ship nice and dry in a sunken reef.

"While you're doing that I am going out, procure a camera, some of those silver salts, and such things, and rig up a baited hook for Musgrove in case he seeks to deprive the Gingerbread's miners of their right reward for their exhausting efforts to pay dividends. Let's see what ten thousand dollars really looks like. I don't believe there is that much money in the world."

Big Bob gazed doubtfully at his assistant still stretched on the bed, reached into his side coat pocket, pulled out a bundle of bills —hundreds, fifties, twenties, tens, and fives—and tossed them onto the bed.

Grey languidly picked up the bundle, which was about the size of a common building-brick, ran over the ends of the bills once, and tossed the money back into Big Bob's lap.

Then he rolled off the bed, and sauntered out the door. Big Bob looked after him with a smile, stuffed the money back into his pocket, and somewhat uneasily reopened his favorite Poe.

His gray-haired assistant had a vexing habit of being right on his scientific data, and even Big Bob's faith in one of his pet authors was somewhat shaken. While his assistant was gone, Big Bob, having once been a deep-sea sailor, ran out the lines as Poe described them, and found that Grey was right in his criticism.

He hurriedly pocketed the book as the assistant entered the room, and looked up questioningly.

"Bob, let's take a walk," suggested the assistant. "I know a very nice photograph-shop in which we can amuse ourselves for the rest of the afternoon and evening. We'll bait that hook for Musgrove. Bring the bundle of infinite delight along."

Once in the photographer's place—the owners and all others barred out for the rest of the day—Big Bob and Grey got busy.

The proceeding was simplicity itself. They merely fastened on the wall a hundred-dollar-bill, a fifty, a twenty, a ten, and a five, then took a picture of them, "life-size," as Big Bob commented in amusement.

Then, with certain chemicals, Grey prepared some thin bond-paper he had bought at the stationery-store on the way from the hotel, and on this paper the two, from the negatives of the bills, printed what was in fact counterfeit money.

Other negatives were prepared of the backs of the bills, and from them the backs of the false notes were soon reproduced. When the fake money was dry—which did not take an hour in the high, dry air of Colorado—the two men crumpled the notes in their hands time and again, then dipped them in a solution of cold black tea to give them the appearance of age and use.

"Now we're eligible for about a thousand years each in the Federal pen, I guess," Big Bob remarked questioningly to his assistant

"Exactly," was the quiet reply. "But no one knows it but ourselves, and no one will unless Three-Finger puts his other two in the game

"This 'queer,' as the secret-service men and others call counterfeits, will not deceive a bank teller for a moment, for there are no seals on it, you notice, or colored threads in the paper.

"But Three-Finger, if he displays a craving for our little pocket change, is no expert moneyologist, and under the natural excitement of a hold-up is not liable to be critical.

"We'll pass him his own undoing, and take the real stuff on over Berthoud with us. When Musgrove tries to pass the stuff he will have Uncle Sam after him.

"Now, let's destroy every trace of our 'plant,' or we might get into trouble, too. As it is, we'll look wise, say nothing, and pass the whole thing up to Musgrove. He's the goat."

Back in the hotel-room again, Big Bob kicked off his shoes, loosened his waistband, sank down into his big chair, and promptly went to sleep.

"That old rhinoceros could sleep in a cactus-bed," mused Grey to himself enviously, as he once more picked up his copy of "Practical Chemistry."

Restless, unable to sleep, the assistant soon laid down the book, and strolled out to get some fresh air and tire himself into a sleeping mood.

Big Bob half opened one eye, watched his assistant go through the door, and dropped to sleep again, still upright in his chair.

"Gone down to the photo fiends again," he murmured to himself. "Grey is cracked over chemistry and all that scientific foolishness, and—"

Again he snored.

It was midnight before Grey came in. Bob was asleep, but one eye opened almost automatically, like an owl's, to make sure that it was his friend, and not Three-Finger.

Grey silently threw off his clothes, bolted the door, pulled his revolver from its holster, tucked it under the pillow, and crawled in.

Bob was asleep again in three seconds, but Grey studied the dim hole in the ceiling for hours before he fell into a troubled doze. Once in the night he carefully slipped his hand under Bob's pillow and as quietly pulled it out again. The money was safe.

Next morning at sunup the two, in a light buggy behind a good pair of mountain ponies, started up Berthoud Pass for the Gingerbread Mine on the other side.

Bob carried no weapons, but Grey's .45 lay handy in his lap under the dust-robe.

At eleven o'clock they were nearing The Top, as the tip of the Pass was called. The atmosphere was thin. They were nearly ten thousand feet above the sea, and the sun scorched down on them as from a gigantic burning-glass.

Their panting horses stopped for breath, and both men rolled a smoke. Neither had spoken a word on the whole trip.

"Got a match—" began Grey.

He was interrupted with a sharp, cold, quick, decisive, "Hands up!"

"Three-Finger," Grey whispered to Big Bob. They were taken completely by surprise, and both had nothing to do but to point their hands at the sky, arching blue and ironical.

"Get out and line up," commanded the hold-up. He was none of your low-browed type, but one of those hawk-eyed, iron-nerved men of the identical kind who, centuries before, had raided all the western coast of Europe in their pirate ships—the Vikings.

Big Bob's eyes glowed, but he held his huge arms well up, at least as far as his somewhat ample waist measurement would let them go. Still he did not move a muscle.

"What's the use, Musgrove?" asked Grey easily. "All you want is the wad. We need our pocket change, you know. You haven't any real use for watches. None of that's in your line, anyhow, I believe. Now, if you'll permit my big friend here to lower one arm—slowly and carefully,. Bob, remember—he'll toss it out to you. Then we'll all feel better."

Three-Finger glanced the two in the buggy over thoughtfully, and covered them a bit closer with his shotgun. He was suspicious, even more so of Big Bob's silence, which was dangerous, than of Grey's ironical humor.

Without a word he stepped to the front wheel of the buggy, and, with the muzzle of the shotgun, poked down the dust-robe and revealed the .45 in Grey's lap. Jabbing this with the muzzle of his gun from Grey's knees to the bottom of the buggy, he picked it up with one hand as he held the shotgun on the two in the seat with the other.

"Toss her over," he then commanded, looking at Big Bob with a grin.

Bob was a philosopher in his way, just as Grey or Musgrove was, for that matter, each in their way.

Bob calmly reached into his pocket, and, with a sigh, tossed the bundle of green bills over the buggy-wheels to Musgrove, who deftly caught it with one hand.

After a keen glance, he slipped it into his pocket. Then he backed away a few feet, taking the .45 with him and keeping his shotgun ready for instant use, and rapidly ran over the figures on the bills.

"Ten thousand, did you say?" he politely asked.

"Exactly," responded Grey whimsically.

"You'll find enough to do you for a while," added Big Bob as he lowered his arms. Three-Finger gazed at him keenly

for an instant, sized up his man, and let him keep his arms down. Grey lowered his arms, with a sigh, and once more took up the half-made cigarette.

"Got a match, Musgrove?" he finally asked as the hold-up shoved the bundle into his coat-pocket. Bob laughed, and Musgrove smiled sourly as he reached in his vest-pocket, drew out several, and handed them to Grey.

"Thanks!" he puffed as he held the light for Big Bob to use. "Guess we might as well drive on, Bob. Musgrove will excuse us?" he added questioningly to the hold-up

"Go ahead," that worthy remarked as he lowered his shotgun into the hollow of his arm. "I'm tapping the Gingerbread people, not you two, remember," he added.

"Except my pet six-gun," reminded Grey significantly.

"Guess I'll keep that for a while," Musgrove replied with a laugh. "You don't seem to need it."

Big Bob laughed at Grey—not at Musgrove

"Trot along, gentlemen," said Three-Finger.

"See you later," added Grey as Big Bob started the rested ponies on up the grade.

"In Old Nick's domain," murmured Bob under his breath.

"Now, Robert, that would involve us in the future and tends to cast reflections on our conduct here in the present," admonished Grey gently. "Got a match, Bob?"

The two slowly climbed up the grade in the buggy on a walk, and drove around a sharp turn before Big Bob spoke.

"Grey, for a gun-man, the real live thing, you're a peach," Big Bob remarked, with a grin.

"Why so?" asked his friend.

Big Bob raised his voice in a mighty yell, then brought down his war-club of a right arm on Grey's back, almost knocking the breath out of him. The ponies had reached The Top, and had stopped to rest again.

"Got a match?" gasped Grey. Big Bob not only had the match, but he lit it and held it to the tip of his friend's cigarette. Then he gathered up the ribbons, and the ponies rattled down the Pass to the mine.

Three-Finger dumped the swag into his sack, threw it over his shoulder, and chuckled at his wonderful success as he dropped down the Pass and struck the railroad tracks.

IN MEMORIAM.

BY ROBERT T. CREEL.

AH, Fowl! But yesterday I watched thee industriously
Scratch, deep into that portion of earth which I call
Garden, valiantly pursuing the particles of
Insect life that abound therein. Alas! On that fell
Day, thou wert not favored of Fortune, and must needs
Be content with divers seeds, sown that very
Morn, with infinite care. Angered beyond compare, I
Slew thee—slew thee without remorse, but with an
Ax, and thus did end thy henly aspirations, beguiled
By the thought that, absorbing thee in
Portions, I should gain strength to continue the
Battle of life. Now, as I behold thy sinewy
Neck, stripped of feathers and cuticle, I marvel that
Power was mine to wield the ax with such result
Assuredly, age has not robbed thee of thy youthful
Vigor: seven times a grandmother as thou art, thy
Mighty biceps, rigid in death, are less pliable
Than steel, thrice hardened. Fear not. Thy corpse shall
Remain inviolate. Were the reward greater than the
Riches of Solomon, I would not—could not bite thee.
Wherefore, to the railroad lunch-counter, I'll
Consign thee. Ages hence, when I am dust, some Hopeful
Hoghead, delving for food among those relics of
The past, will bring to light thy adamantine form
He'll hail thee with amaze, asking thy
Name, and it shall be called—
Springchickenfifticents!

MINUTE-MEN OF THE RAILROAD.

Fought on Firing-Line in Revolution of Transportation.

Firm in Faith, They Faced a Fusillade of Ridicule and Strove for Progress—Bizarre Schemes Proffered by Volunteer Inventors.

BY FRED C. FILES.

WHEN the railroad was first proposed, everybody took a stand on one side or the other of the great issue and contended for their opinions as men fight for their lives. A very large majority knew beyond the possibility of refutation that railroads were but the fantastic dreams of irresponsible visionaries. A small, steadily increasing minority were equally positive that railroads were the highways to the millennium. The men of the minority were the volunteers who fought for the beginning of the railroad.

One of the first and most irrepressible was Evan Thomas, of Baltimore. He was in England at the time of Stephenson's first experiments with railroads. These experiments completely turned his head.

When he came home he could talk of nothing but railroads, railroads, railroads. He buttonholed friends, acquaintances, and strangers in the streets and talked railroad to them until they were bored. He cornered business men in their offices and stores and talked railroad to an annoying extent. He corralled beaux and belles at social gatherings and talked railroad when they much rather would have been dancing.

Evan Thomas was of such excellent family and reputation that it would have been outrageous to have snubbed him. So Baltimore listened, though quite convinced that Thomas was in the clutches of an aberration.

One man only was impressed by him—his brother, P. E. Thomas, the solid, substantial banker, who was considered the personification of business shrewdness and conservatism. He talked less than Evan, very much less, but every word carried conviction. How he took the lead in organizing the Baltimore and Ohio Railroad Company has already been told in this magazine. How the enthusiastic Evan undertook to solve the problem of motive-power with a sailing car, and how that sailing car was the seed from which Russia's first great railroad sprang, has also been told.

Whitney's Tireless Struggle.

The volunteer railroad builders who followed in the footsteps of Evan Thomas were legion. All had wonderful schemes for adjusting the question of transportation which

they proffered to unappreciative managements for nothing.

The most tireless was Asa Whitney, the great evangelist of the Pacific Railroad. Probably no man in history ever devoted so much time, money and effort to a commercial enterprise from which he did not expect to gain any pecuniary advantage, and doubtless no man who ever advocated a really great project was so utterly impracticable.

Whitney had no extraordinary gift for inspiring others with his views. He was deterred by no obstacles and discouraged by no defeats. He was arrogant and conceited, although lacking entirely any practical knowledge of railroad building. He had such a hearty contempt for the whole engineering profession that he became violently angry whenever anybody began to talk of cuts, fills, grades, and bridges. Notwithstanding this, it is conceded that Whitney did a great deal to create the public sentiment which ultimately resulted in the building of the first transcontinental railroad.

One volunteer railroad-builder who played an important part in educating the American public up to the point of accepting the railroad has been ignored by history. He was D. Kimball Minor, the publisher of the New York *American*. On January 1, 1832, he issued the first number of the *American Railroad Journal*, the first publication ever devoted to the railroad in the United States. People did not believe in railroads when Minor started his *Railroad Journal*. He did not publish it with any expectation of making money from the outset, but strove to create public opinion in favor of the railroad with a view to future profits.

Poisoned the Sea-Serpent.

It did not require much space for Minor to tell all he knew about railroads, so for several years most of the *Railroad Journal* was devoted to agriculture, science and miscellany. The issue of September 7, 1833, for instance, contained a detailed description of a sea-serpent harpoon, invented by an unknown genius of Nantucket. The head of the harpoon was hollow like a rattlesnake's fang. Back of the barb was a long trigger, which was to be released when the head of the harpoon was plunged into the sea-serpent. This exploded a percussion cap, fired a small charge of powder and squirted a dose of poison into the serpent. The sloop Fame, Captain P. C. Myrick, with a picked crew of fourteen men sailed from Nantucket on July 1, 1833, on a sea-serpent hunt, equipped with two of these weapons, as was set forth in the columns of the *American Railroad Journal*.

In spite of Minor's unbounded faith in railroads, his opponents soon had him on the defensive. For a long time his favorite retort to all strictures upon the perils of the railroad was to compare steamboat disasters with railroad accidents. This was incontestable for the record of steamboat explosions, fires, and other forms of destruction always accompanied by heavy losses of life, quite overshadowed the mishaps on the few railroads in the country.

The ardent but ridiculous friends of the railroad troubled Minor more than its enemies. Once he lost patience with the volunteer railroad-inventors and burst forth into a long editorial in which he complained of the great number of plans for motors to be operated by springs or weights that were being thrust upon him. He pointed out that any one who was not ignorant of the most elementary mechanical principles ought to know that a spring motor never yielded as much power as was put into it, and suggested that the inventors would do well to read up a little on physics before undertaking to invent locomotives.

Wanted Foot-Railroads.

The great majority of volunteer railroad-builders who undertook to settle all the difficulties that beset the engineers of the early days were indeed very impracticable.

One man who hid his identity under the pen-name of "Publicola," beginning in January, 1833, devoted a great deal of time and stationery to advocating "Foot-Railroads."

Publicola declared that "those inventions are most important which enable all classes of society to make the best use of their personal strength. Railroads for the use of individuals like a foot-path would do this. Stages, steamboats and railroads for horses and steam-carriages will never do half the conveyance of passengers and goods over the country. Foot-railroads would be a vast benefit, not to the rich only, but chiefly to the laboring classes."

Narrow foot railroads could be built at little expense. Carriages for such a rail-

road could be constructed to weigh no more than a wheelbarrow, or less than fifty pounds. As families that purchased at country stores generally did not buy more than a hundred pounds of commodities, and most commonly fifty pounds, the force required to move the hundred pounds in its fifty-pound carriage on a level railroad would be a small fraction more than was required to raise half a pound over a pulley.

A man weighing one hundred and forty pounds could move forward a load of two hundred and eighty pounds a quarter of a mile on a foot-railroad as easily as he could climb a fifty-foot hill. As a man could draw one-seventh of the load for a horse, he could draw a load of two thousand nine hundred pounds two miles an hour on a foot-railroad.

Even foot-railroads would have been rendered superfluous if the plan proposed by "C. O.," in a letter dated, "Virginia, August 9, 1833," had been adopted. C. O. would have had iron-bound cylinders from seven to twenty feet high, and from five to twelve feet long, packed so tightly with cotton, tobacco, or other freight that no part of the lading could shift.

Could Propel Two Cylinders.

If this was properly done, it was plainly manifest, said C. O., that on a smooth and level road of common earth, power equal to one horse could draw or roll more than one of these cylinders at any required speed And if these cylinders were attached to a steam-carriage they would offer scarcely any resistance. In fact, C. O. was certain that the power of one man on a treadwheel would propel two of these cylinders.

On the face of it, this was such a practical suggestion that it is not at all surprising to find it revived eighteen years later and adapted to the railroad. By 1851 everybody had become reconciled to railroads, and it was conceded that perhaps they might be better than smooth and level earth roads for purposes of general traffic.

So Lawrence Myers, of Pottsville, Pennsylvania, patented a system of cars which he called a "revolver-train." The cars were made up of wrought-iron cylinders "of sufficient length to suit the track," for those were the days when boards of directors fixed the gage of their roads without waiting for the advice or consent of any other railroad. The cylinders were recommended to be forty-two inches in diameter. On each end was to be riveted a railroad wheel fifty-two inches in diameter, which would raise the cylinders five inches above the rails.

Two or more of the cylinders were to be connected by wooden frames. Being coupled together, they constituted the revolver-train. The cylinders were to be loaded with coal or other commodities that thrashed about in the car. The revolver-train was actually given a trial trip on the Philadelphia and Reading Railroad in August, 1851, and it was alleged that President John Tucker was favorably impressed by it. The impression could not have been very profound, for the revolver-train was never heard of afterward.

Splashing Along the Rails.

Tie-preservation and rail-preservation became an acute question very early in the history of the railroad. In September, 1836, an anonymous contributor gave the world a plan for rendering both the ties and the wooden rails "as indestructible as the best iron railroad" that was certainly unique, if it had no other merit. The inventor had observed that wood did not decay so long as it was kept under water. He had also noticed that water was abundant everywhere; hence, the thing to do was to bring the water and the railroad together.

From these fundamental facts the inventor evolved a scheme for making railroad grades into ditches in which water was to be kept flowing constantly at a depth of one inch over the tops of the rails. Waste-weirs were to be provided at suitable points to regulate the depth of the water. To obviate a possible source of discomfort to passengers, paddle-boxes were to be placed over all wheels to catch the splashing water.

The only obstacle to this plan was the fact that in winter the water might freeze. But it was a very simple matter to let the water run off in cold weather. This would not affect the rails and ties, for wood does not decay in a freezing temperature. As a particularly strong point in favor of his plan, the inventor declared that his canal-railroad would cost five thousand dollars a mile less to build than the ordinary railroad

The canal-railroad was outdone by Richard Badnall, an English inventor, whose "Undulating-Railroad" created something of a stir in London in 1833, and was dis-

cussed at some length on this side of the Atlantic. Badnall had observed that a car in running down-hill acquired momentum that carried it up-grade if there was a second hill at the foot of the first. This being the case, it followed that if you had enough hills on your railroad the trains would practically run themselves. Level stretches of road were to be avoided at all hazards. Even in going up-hill there should not be a steady pull as on inclined planes, then regarded as the only way to ascend a hill, but the ascent should be broken into a series of undulations. Badnall had a model built and gave startling demonstrations, but no one could be induced to try his plan.

Before Westinghouse thought of the air-brake, the great difficulty on the railroad was to control speed. It was easy to attain speeds of thirty, forty, or even fifty miles an hour, but to stop, particularly in an emergency, was quite another matter. Observing this, E. Merriam, of Brooklyn, in 1846, volunteered a plan for overcoming this difficulty.

Merriam proposed to attach over the car-wheels a tank holding ten pounds of oil. Whenever a stop was to be made the oil was to be discharged on the wheels. This would cause them to revolve impotently on the rails. The matter of discharging the oil on the wheels was left to the judgment of railroads using his invention.

COOK SACRIFICED HIS SHIRT.

THE text was taken from the fifteenth chapter of St. John, the thirteenth verse: "Greater love hath no man than this, that a man lay down his life for his friends."

The sermon was delivered by the subyard-master at Bellefontaine, Ohio, as follows:

"If anybody wants to give up his chances for Heaven he can put 'em on Bob Cook of Degraff If Bob don't get an extra harp with his, there's no use of any track-pilot making a bid.

"Bob was walking along the road-bed at Quincy curve, just out for a little exercise. He happened to look down and saw a broken rail Now a little thing like that would be overlooked by a whole lot of people who are thinking more about their own business than about what is good for others

"Of course, that kind wouldn't be walking; they'd be in parlor-cars, I reckon. But Bob Cook knew the road and a smattering about time-tables. He could come mighty nigh train-despatching without using the wires.

"As Bob saw the broken rail he looked at the sun and says to himself, 'It's near time for the Big Four Flyer No. 11 to be along.' He had another think that told him that if No. 11 was on time she would at that identical moment be about a half mile up the track.

"Quincy curve is pretty short and quick. Bob Cook knew there was no way of stopping the flier but to flag her. He had no flag. It was a warm day and Bob was in his shirt-sleeves. He had on one of them shirts that our boss calls flagrant, meaning that it was conspicuous.

"Bob started on a run up the track at a Marathon gait. As he ran he wondered what he was going to do to flag the flier. He come to it quick.

"He just jerks up that shirt and pulls it over his head as he was running, and then he began waving. The flier was on time all right. It is mighty unlucky sometimes for a train to be on time. Bob had wished that the flier would have been late But if she had, Bob wouldn't have had no chance to get in the salvation line.

"The engineer saw the flagrant shirt whipping the air and he whistles for the air-brakes and puts the throttle out of place just as Bob sidestepped the track. The flier was in a few feet of that broken rail.

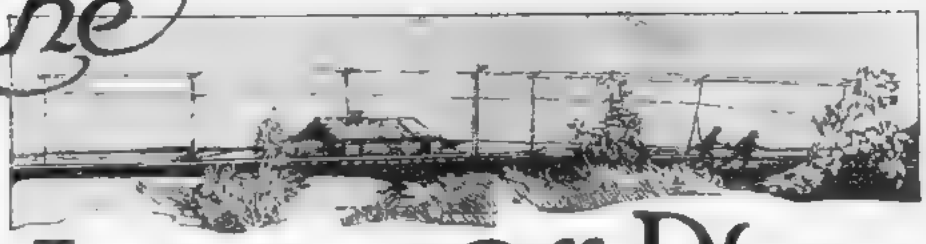
"There was over a hundred passengers on the flier. That means, I'm thinking, that Bob Cook will have a hundred harps. Why, man alive, he can have an orchestra of his own in Heaven, and there won't be any questions as to whether he has a union card or not. If Carnegie wants to get a beat on St. Peter he will have to get a move on him."

The subyardmaster was asked if he thought the text was exactly appropriate, inasmuch as it spoke of the man who laid down his life for his friends. Certainly the passengers were not Bob's friends before the flagging, and besides, Bob didn't lay down his life.

"Well," replied the sub, "I'm no skeptic. But if the man who laid down his life for his friends has that sort of love, what do you think of the love that a man has for people he don't know? And if Bob Cook didn't lose his life in what he did, he saved a bunch that would have lost theirs, or got them into lawsuits.

"If it wasn't against the law to issue railroad passes, I'll bet Bob Cook would have a pass for life over the Big Four. Why, man alive, I've been told that that shirt Bob waved was the best he had and almost his only. Don't that count some?"

The Jumping-Off Place



By JARED L. FULLER

CHAPTER XIX.

Besieged.

IT was not with any real love for the business that Warburton played Peeping Tom. One must fight fire with fire.

The trio of wretches who sat about the camp-fire in the hollow, he positively knew to be three full-fledged rascals—men of the worst criminal class

The brief conversation which now came to his ears proved their status in society beyond peradventure

"But if there ain't nobody but a gal in the house, wot d'ye want of *us*, brother?" drawled Red. "You're a poor sort of a gun if ye can't handle one gal."

"It isn't that," said Grimsby. "It's the house itself. It's built of logs, and the doors are double-barred."

"Bust a winder an' git in," suggested Red

"The noise would raise the nearest neighbor. It's got to be done soft. I want a man to work at each door. The girl will be kept busy then—"

"Plugging us with her daddy's shotgun!" exclaimed the other yegg.

"Nix on that!" exclaimed Reddy "I don't want ter stop no lead—'fraid of lead-poisoning."

"She won't shoot," said Grimsby shortly. "I want her attention held for only a minute. That minute will give me a chance to get in by a way I've found. Then I'll grab her, bind and gag her, and—well, there you are!"

"But what do we get?" demanded the tall man.

"I've told you. It's good pay for what you do, too. You can beat it just as soon as I'm in and have the gal. You won't have nothing to do with what follers."

"You're holding out on something, brother," said Red suspiciously.

"And what if I am?" demanded Grimsby angrily. "It's nothing that you could ever know about, or pull off by yourselves. You can bet on that."

"And to-night's the night?"

Warburton waited to hear nothing further except Grimsby's emphatic affirmative to this last question. He crept up out of the hollow and over the ridge, and so sought the railroad in the dark.

He knew that the trio around the fire had spoken of MacCormack's house. Aliene was the girl Grimsby proposed attacking. Warburton did not stop to ask himself what the convict wanted in the house, or of Aliene; merely the girl's peril appealed to him.

He forgot all about the railroad business then. His interest was centered in the girl on the hill.

If Old Jack had gone off on another trip, why hadn't he sent Aliene to a neighbor's to stay—or engaged somebody to remain with the girl? Jack had been warned that

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his daughter was the object of Grimsby's suspicious attentions.

But the old prospector's carelessness of his daughter's safety only made Bill Warburton the more troubled for her. He started on a brisk run now, along the railroad, and in ten minutes reached the path up the hillside by which he had been taken to the MacCormack cottage the evening Aliene had rescued him from the fire.

There was no light in the house, and for the first time Bill realized that it was very late—almost midnight. Aliene, if she were here, must long since have gone to bed.

He went to the window of the room in which he knew she slept, and tapped lightly on the shutter. Since the evening he had caught Grimsby trying to peer in at the window, Old Jack had fitted shutters to all the windows, and they were fastened on the inside.

He had to tap again before he heard anything from within. The window was open for the circulation of air, and he heard Aliene spring out of bed.

"Don't be frightened, Aliene!" Warburton whispered, with his lips at the aperture beside the shutter. "Dress yourself quickly and come to the door."

"Is that you, Bill?" asked the girl doubtfully.

"Of course it is, Aliene," he responded cheerfully. "Nobody else would have the cheek to wake you up at this hour. Hurry up."

"What's happened?" she demanded, and he knew that she was frightened.

"It's nothing about your father," he hastened to assure her. "Come, dear, dress yourself and let me in. It's mighty important."

In two minutes she unbarred and opened the front door. She had lit a lamp, and as soon as he was in the room and had barred the door again, she took him by the shoulders and scrutinized his face.

"What have you been doing now, Bill?" she demanded. "You haven't been to see us of late, and that nasty Jerry told me on the street that you had been fired by the old man."

"That's right, Aliene," he returned, but smiled. "I have done nothing really wrong, however, and I have hopes of being reinstated again—in time."

Her forehead was puckered into a worried little frown, but with her plaits of hair on either shoulder and her pretty brown throat bare, Bill thought she'd never before looked half so sweet.

"Really, Bill, I don't understand you," she told him. "And what under the sun brings you up here now—and when daddy is away?"

"And why are you here when Old Jack is away?" grunted Warburton.

"To look out for the house, of course."

"After what I told him about that scoundrel snooping around here?" exclaimed Warburton with some heat. "He seems to think a whole lot more of the house than he does of you, Aliene."

"Why, Bill?"

"Well, I'm worried. I wish he wouldn't go off and leave you here alone—"

"But he is bringing home a lot of gold, Bill," she whispered. "You don't know! I believe he must have a great fortune by now."

"How great a fortune?" demanded Warburton curiously.

"Fifteen or twenty thousand dollars. I never, never thought we'd have so much money—"

"But he doesn't keep it in the house?"

"Of course not!" returned the girl, looking at him wonderingly.

"Then I'm hanged if I know what that rascal wants," muttered Bill.

"What is the matter, Billy boy? You didn't come here in the middle of the night without some good reason."

"Glad you think that, Aliene," he returned, smiling again. "And you're mighty right. There's something going to happen."

"What is it?"

"Well, I overheard three fellows talking about making an attack upon this house to-night, and one of them was the fellow off whom I snatched the wig the other time."

"Oh!" she cried.

"Yes. They are coming. Mebbe I'd better take you down to Clem Howard's, and then come back here and try to stand them off—"

"Oh, Bill! I couldn't leave the house."

"Why not?"

"I promised daddy I wouldn't. Whenever he is away now I stay right at home."

"And that's all the good my warning Old Jack did, eh?" muttered the young fellow. "He is worried about something in the house, then—not about what might happen to you."

"Bill! How can you? I told you the money he sells the gold for is deposited in the bank."

"All right, but those scoundrels are after something— Sh!"

There was a sound outside. Was it a footstep?

"Is the other door locked?" whispered Bill, seizing the girl's hand

"Yes—and bolted."

"This door is all right. The shutters are fastened. I don't know how that scoundrel proposes to get in while his mates fret you at the door—"

"There isn't any other way— Oh!"

"Well?"

"There was a cellarway, but daddy closed it up. He started to dig a cellar while I was working at Carlotta, you know, but then he changed his mind, I guess, and filled it up and put a big rock over the hole outside."

Warburton noted this explanation, but his ear was strained for other sounds, and he heard them.

There came a sudden thumping on the side door. Bill drew his gun and ran into the kitchen, the girl at his heels. She went quickly and took down the holster and belt from over the mantelpiece. She buckled the belt about her waist and drew the revolver from its sheath.

"This is loaded," she whispered. "Have you plenty of cartridges, Bill?"

He nodded. At that moment there was a knocking at the front door, and Ailene darted into the parlor.

CHAPTER XX.

What About the Cellar?

BILL WARBURTON was assured that Red and the other yegg were following out Grimsby's instructions, and that one of them was battering on the side door, while the other beat a tattoo on the panels of the front.

However, Grimsby expected to get into the house, and it would take him some moments. He wished the girl, whom he supposed would be alone in the MacCormack house, to have her attention fully taken up by these apparent attempts to enter by the doors.

And Bill proposed to strike first himself, and so fool the trio of rascals.

Instantly he drew the bolt, turned the key in the lock, and flung open the kitchen door. He kept well to one side of the doorway, however, and as the door swung on its hinges he shot four times in quick succession into the oblong of darkness.

There was a yell, and the hasty thumping of heavily shod feet.

He believed it was Red whom he had chased. Without doubt one of the bullets had winged the yegg.

Bill closed the door again, and locked it. As he did so he heard Ailene shoot twice at the front door. He bounded into the other room.

The girl, taking pattern from what Warburton himself had done, had opened the front door on its chain. The open space was perhaps four inches wide, and through this opening she had fired.

But the tall yegg was of different caliber from Reddy. Instead of running, he thrust his own gun into the opening, and, as it chanced, the girl was crouching in a corner, right in line with the muzzle of the deadly weapon.

Bill let go with his two remaining shots in quick succession. One of the bullets struck the tramp's pistol and swerved it just as it exploded, so the ball did no harm.

The next instant Bill flung himself at the heavy door and banged it shut.

The yegg's gun fell inside the room and his hand barely escaped being crushed.

Warburton ejected the empty shells from his own gun and loaded it again before he did another thing. Ailene was openly frightened now—and with reason.

"Oh, Bill! what will we do?" she gasped, clinging to his free hand.

"We'll sure bore holes in those fellows if they don't keep away," he declared. "I've chased one of them—"

As if to refute his statement, a blow landed on the side door almost sufficient to shatter it. The enemy had evidently thrown discretion to the winds, and was determined to make a breach and get into the house. The pistol shots and blows on the door would surely arouse Clem Howard or the watchman up at the nearest mine shaft.

Bill and the girl started for the kitchen. Another blow fell upon the door, and the wood about the lock began to splinter. Bill sprang forward to shoot the bolt again.

At that moment a most startling thing occurred. There was a small mat in the middle of the kitchen floor under the table. This mat was suddenly heaved out of the

way by the opening of a trap-door that Bill Warburton had not known was there!

Even Aliene was frightened, although it was evident that she had been aware of the existence of this cellar-trap.

"He's got in by the cellar, Bill!" she cried. "Quick!"

Warburton pulled his gun down on the opening trap, but it was fortunate that he held his hand for a moment.

Above the aperture appeared the shaggy head of a man, but it was not the head of Grimsby, the convict.

The man coming up from the cellar was old Jack MacCormack himself!

"Father!" cried the girl.

"Well, well! What's all this disturbance? Is that you, Bill? What's going on? Seems to me you're always a trouble-bringer."

"Trouble would land on you with both feet, MacCormack, if I didn't happen along to warn you," returned Warburton sharply.

"Hush!" whispered Aliene, as the noise without subsided for the moment, and her father closed the trap-door. "Bill is right, daddy. These men—"

"What men?" growled Old Jack.

"Didn't you hear them?" she demanded. "One of them has found the outside entrance to that cellar! Why, you must have come in that way yourself!"

MacCormack looked very much confused and said nothing.

"Why, the man will follow you in, daddy. Bill heard him tell his companions that while they hammered at the doors he could get into our house by another way—"

"Well, he won't get in through that hole," growled Jack.

"Why not?" she asked wonderingly.

"He mebbe can move away the rock, but underneath is a cement wall. He wouldn't break through that in an hour."

"Oh, daddy! Then how did you come in?" she demanded.

Bill had turned away, but he heard her question, and he likewise heard Old Jack hiss:

"Shut up, will you? I never see such a long tongue as ye have."

The girl became suddenly quiet. The attack on the cottage was plainly ended. Warburton felt uncomfortable. He had stumbled upon a discovery that evidently displeased Old Jack, and Aliene was troubled by that same discovery, too.

"I reckon the fun's over," said Bill slowly, starting for the door. "Anyway I'll take a look around."

"Maybe they are waiting to shoot you, Bill!" cried the girl. "Don't go until morning."

Old Jack laughed harshly. "I reckon none o' them fellers out there will hurt Bill," he snarled.

"Why, daddy!" she exclaimed.

"It looks mighty strange to me," continued the old man, eying Warburton with great disfavor. "All these disturbances happen when Bill is around. We're left peaceful enough at other times."

Aliene laid a restraining hand on Warburton's arm, but the young fellow had no intention of answering back.

"It's lucky, I reckon," pursued MacCormack, "that I happened to come into the house this evening and go down cellar to 'tend to a little business. No knowing what might have happened if I hadn't been yere."

"Oh, thunder!" ejaculated Warburton, pulling his cap down over his eyes and starting for the door again. "I can't listen to any more."

"You don't have to listen," growled Jack. "You keep out of my house hereafter and you won't have to hear my opinion of you. I ain't anxious to talk to you on the street."

"Father!" cried Aliene, "how can you?"

"You're a fool, gal," snarled the old man. "I've been leary of this fellow from the start. He's in league with them very fellers that pounded on the door to-night. You'll find I'm right."

"I know better!" she retorted. "You are beside yourself."

"That's a nice way to talk to your own father—"

"Hold on!" exclaimed Bill, with his hand on the latch. "Don't you two fight none about me. Jack's wrong and you're right, Aliene, but I can afford to wait and be proved out."

"Bah!" spat out MacCormack. "Arbuckle found ye out. Ye got fired off the railroad. You're no good. Ye come here a bum—"

The girl stopped him effectually by putting a hand on his lips.

"I will not hear another word, father," she cried. "I'm your daughter, and you need me, but you sha'n't malign my friends that way. Good night, Bill. Don't come here again, but don't you forget that I

know you're all right—you're all right, Bill!"

As the young fellow flung himself out of the house Aliene burst into tears and ran into the front room, banging the door behind her.

Bill Warburton was not so greatly enraged as he was puzzled. He considered the source of the insult and put it aside.

In his secret heart he considered—had long considered—that old Jack MacCormack was not entirely "right in his upper story." This outbreak of the old man proved Bill's suspicion as at least partially correct.

The old prospector had become a monomaniac on the subject of his being hounded by those that would learn the secret of his riches. Now, in addition, Bill came to the conclusion that there was something absolutely queer about MacCormack's secret.

As the young fellow tramped back to town, quite assured that Grimsby and his companions had been frightened away from the cottage on the trail, he discussed a long series of events in his mind—events that finally had come to a head on this night.

He remembered how MacCormack came home and sneaked into the house so quietly on that occasion when he, Bill, was still convalescent at the MacCormack house.

All night the old man had worked in the kitchen—or under the kitchen! What had he been down in the cellar for? What had he ever dug that cellar for in the first place? Then—according to his own testimony—filled in the outside entrance with cement?

Twice MacCormack had appeared from the cellar when Grimsby had threatened an attack on the house. Bill was confident of that, and Aliene had not known of her father's presence either time.

Whatever the secret of the cellar was, Aliene MacCormack was not a part. She, too, was worried about her father and his secret hoard of gold.

Bill had seen some of the gold himself, but where did it come from? Fifteen or twenty thousand dollars, Aliene had said only this night, the old man had banked.

Twenty thousand dollars! The sum of the fortune stolen two years before from the paymaster's safe—from the safe of Paymaster Knott, who was murdered by Gage Mostyn, now known as Grimsby, the escaped convict.

It was since that murder that this cabin of MacCormack's had been built. The logical thoughts flashed, one after another, through Bill Warburton's mind.

Gage Mostyn had been caught and tried for the murder; he must have hidden the twenty thousand dollars. He had come to Wildwood immediately after his escape from the penitentiary.

Why?

The answer was easy. Bill had decided that already. Grimsby came to get his fortune, but he did not succeed in getting it.

This explained his interest in the MacCormacks and his desire to get into their house.

He had buried his stolen fortune on the spot where, later, Old Jack had built, or added to, the old real-estate office. Grimsby knew that his fortune was under the house.

And from figuring to this climax, it was easy to come to another conclusion—and one that Warburton believed was irrefutable.

Why had Old Jack started to dig his cellar from the outside, and then walled up the opening—yet still used the cellar?

He had struck the hoard of money stolen from the railroad company!

This, then, was the secret of the old man's sudden wealth. His story of the "pay-streak" he had struck beyond the range was merely a subterfuge.

He had found the twenty thousand dollars while digging his cellar. Whether he guessed how it came there or not he was wary enough to make no public announcement of the find.

Yet, if he produced such a sum of money at once, he would be suspected. Every man in Wildwood knew that old Jack MacCormack had gone broke.

So the old prospector had hatched up this scheme he was following out—and it was not an uningenious one.

He removed a part of the cached money at a time, went off on his secret trips, exchanged the money at other camps for gold-dust, and brought back the gold to sell as if he had scooped it out of some rich pocket.

In this way, and during the continuance of several months, he had completed the transaction. The whole sum of the stolen money had doubtless been exchanged into gold, reexchanged for cash, and then banked

If Grimsby had succeeded in getting under the house and finding the spot where he had buried the twenty thousand dollars of

the railroad's cash, he probably would have found little of it left.

Wasn't it strange that the convict should not suspect the source of Jack MacCormack's wealth?

On this final and unanswered question Bill Warburton went to sleep that morning.

CHAPTER XXI.

In the Culvert.

THE bother of the whole thing came back upon him with redoubled force the next day.

He could not escape Jack MacCormack's case. The old prospector—the father of Aliene—was a criminal!

There was no doubt of that. Bill couldn't ignore the fact.

The money the prospector had found under his house belonged to the C., B. and W. R. R. It had been hidden there by the murderer, Gage Mostyn.

Bill Warburton was engaged in secret work by the railroad, and he was doubly bound in honor to work for the good of the road.

What a scandal and disgrace an exposure of the old man would create! What an effect upon Aliene—poor, poor Aliene!

He realized that he must do something quickly—he must make some plan by which the money could be returned to the railroad company before the MacCormacks had spent any of it.

If, as he believed, Old Jack had made the double exchange of cash for gold and then back again into cash, there would doubtless be some loss. He had to pay for the exchange in each case.

Considering that the company had long since given up hope of ever recovering the twenty thousand dollars stolen from the paymaster, or stolen *by* the paymaster, as many of the officials still believed, the road would likely forgive the shortage.

If Bill Warburton could prove all his suspicions, recover the money, and get Grimsby into the toils of the law, he would come near to clearing the memory of Paymaster Knott of the dishonor that had been heaped upon it.

"But it's tough luck!" groaned Bill. "Must I bring sorrow to poor Aliene and put Old Jack in bad with the police for the sake of proving Paymaster Knott and his family guiltless?"

There must be some way, he told himself, of returning the money, catching Grimsby, clearing the reputation of the dead paymaster, and yet saving the MacCormacks from disgrace.

But how—how? The question haunted him like a nightmare. He had to see Jim Plaisted that day, but he dared not speak to the railroad detective about this matter, which was so close to his heart, until he could see his way clear.

Under the arrangement made with Plaisted, Bill Warburton was never seen in the detective's company. He merely went to a public telephone, called up Room 27 in the railroad terminal building, and told his superior that he had important information to divulge, and that he dared not give it over the telephone.

"All right," replied Plaisted. "Take your lunch in Granger's across the square. Sit at the first table on the right, by the desk, and face the door. The manager always has a chair turned up for me on the other side of that table. We'll talk there all right."

If a curious person had watched Jim Plaisted and Warburton while they were at lunch, he would not have discovered that they were particularly friendly.

They had no near neighbors, however, and while both seemed to attend closely to the meal, Bill managed to pass over the story of what he had observed in the railroad culvert the evening before—and repeated what he had overheard between Jerry Farley and the mysterious Grimsby, too.

Plaisted listened gravely to the story and commented little. He only intimated that he proposed setting a watch on the culvert, but not one that would interfere with any plans Farley and Grimsby might have.

"And I'll try to find the fellow in the shops that's making this box Jerry speaks of," muttered Plaisted. "He may be perfectly innocent, however, except that he is doing a job for his friend on the company's time."

This was all at the time; but three days later Warburton went to his boarding-house and found a sealed note addressed to him on his mantelpiece. Enclosed was a notice to meet Plaisted that evening at a rendezvous previously agreed upon. It was couched in such language that if anybody else had read the note they would not have understood.

Meanwhile Warburton had spent three

mighty unhappy days. Once he had walked to the MacCormack cottage, but only Jack was about, and he did not wish to speak to him.

Aliene had asked him not to call there again, and he certainly did not wish to have further words with the old prospector.

Nor was he ready to take the girl into his confidence and tell her what he suspected regarding Old Jack's wealth. How could he ever do that, anyway?

He procrastinated, shrank from what was perhaps his duty, and hoped to discover some better way out of the quagmire of doubt into which he had fallen.

Obeying Plaisted's instructions, Warburton slipped out of his lodgings after dark and made his way to a disused tool-shed some distance from the culvert to which he had followed Jerry Farley some evenings previous. The detective awaited him.

"Got your gun with you, Bill?" was Plaisted's first question. When Warburton replied in the affirmative, the railroad detective thrust a small electric torch into his subordinate's hand

"Hold that in your left hand when you get into the culvert. You can flash on the light by just a touch—see?"

"And then what?" demanded Warbur ton

"I'm going in at one end, you at the other. If you hear anything, flash your lamp first—and I'll do the same. I don't want you to shoot me, and I presume you have a similar objection to ending my days just now.

"But if you see anybody else, Bill, who doesn't stop on challenge, shoot! Are you on?"

"I understand. You think—"

"I believe those scoundrels intend bringing matters to a head to-night. I spotted the fellow at the shop who was making a box of sheet-iron just about the size of the aperture in the roof of the culvert. He finished it to-day, and we let him sneak it out of the shops to-night in a gunny-sack."

"But who did he deliver it to?" queried Warburton curiously.

"We'll know that, too, you bet!" grunted Plaisted. "One of our men trailed him, and every person that puts a hand on that box will be spotted."

The chief detective and Warburton did not move from the tool-shed until some time later. Then Plaisted led the way directly to the culvert. He went into the ditch on the upper side, while Warburton crept along the bottomland toward the mouth of the tunnel.

There was nobody about—at least, neither Plaisted nor his assistant caught a glimpse of a single moving figure. Both reached the culvert openings and crept inside.

At the middle they met, and Plaisted shot his light about them. The culvert—save for themselves—was empty.

"Either they have been and gone, or it is not yet time. You know there's a midnight train and I've had a feeling—somehow—that the scoundrels were aiming to ditch that—"

"And blow up the culvert, too?" queried Warburton. "Listen!"

Both men held their breath. A soft and seemingly distant "tick-tock, tick-tock" came to their ears.

Its direction for the moment was puzzling. Then Plaisted uttered a sudden oath.

"It's a clock-bomb! I might have known it would be, and not a fuse! Give 'em more time to get out of the way! Hold your lamp, Bill!" he commanded, and went to the spot where the bricks in the roof of the culvert had been disturbed.

The ticking of the clock came from overhead.

CHAPTER XXII.

At Last!

THE thought shot through Warburton's mind that, perhaps, the bomb was timed to explode before the midnight train went out! It only lacked an hour or so of the time.

Perhaps Plaisted had something of the same idea in his mind, for he tore at the bricks with more haste than care, until he had broken out two in the center.

"Will you put your hands up and ease the box—it's there," panted the detective.

Warburton did so; but his finger-tips seemed burned by contact with the metal box.

The thought of being in this culvert when the bomb exploded thrilled him with a fear that he could not put down.

Plaisted worked madly. He tore away the remaining bricks. The heavy box slid down into Warburton's arms—and with a jar that froze that young man in his place.

"Easy!" muttered the detective. He listened at the side of the box. "The clock is still going. Set it down—so! Now hold your lamp here."

The thing displayed was innocent enough in appearance. The top of the oblong box of sheet iron seemed smeared with plaster of paris. In this plaster, before it hardened, had been set a common alarm clock at one end, and an eight-ounce bottle at the other end.

The bottle lay on its side, and its cork was attached by a piece of catgut to the key which wound the alarm of the clock.

Plaisted wasted no time. He drew from his pocket a small case in which was a pair of sharp scissors. These he used to snip the catgut and the connection between the still ticking clock and the bottle-stopper was broken.

"What have you done?" gasped Warburton, still expecting the infernal contraption to explode.

"Made the thing as harmless as several pounds of hell-fire can ever be," grunted the detective. "See the face of that clock?"

Warburton admitted that he did.

"Look at the dial showing the alarm set. I was right, wasn't I? The hand points to just about midnight. She would have gone off pretty close to the time the express went through!"

"But how could they tell the stuff would explode?" inquired the puzzled Warburton.

"See that stuff in the bottle?"

"Of course."

"It's sulfuric acid, I reckon. You see there's a hole directly under the mouth of the bottle

"Underneath that hole, I will bet, there's some caps that would explode the instant the acid hit them.

"The caps would set off whatever is in the box—dynamite or giant powder. You see, when the alarm went off at midnight, the turning of the alarm key would wind up the catgut and yank the cork out of the bottle.

"Ingenious — infernally ingenious!" muttered the detective. "And we'll get the devils—in fact, one of them is caught already."

"Who?" gasped Warburton.

"The man to whom that fellow in the shops delivered the box. The other made the bomb, of course, and set it here. He probably brought it here soon after dark and then went away. He could make himself a mighty good alibi with this sort of a time-bomb—d'ye see? Appear somewhere in public at the time the bomb exploded."

"But the bomb won't explode," grunted Warburton.

"You bet it won't!" returned Plaisted. "I'm going to take the blasted thing outside and hide it—and under water, you bet! Then we'll wait."

"Do you expect him to come back?"

"I most certainly do, my boy," responded Plaisted. "The train will go through—no explosion. Our friend will wonder what's happened. He'll just naturally have to satisfy himself about it."

"He'll return!" cried Warburton.

"You bet he'll return, Brother Bill! And when he comes, you and I are going to get him. I don't want anybody else in this, Bill. We know who the fellow is—who he really is. Nobody else does know—even the penitentiary folks think Gage Mostyn is dead—dead in the swamp. I found that out."

"You did?" cried Warburton.

"Yes. Now, come along. Give me a lift with this. Don't make a misstep, for pity's sake. If we dropped it good and hard it might go off!"

Ten minutes later the infernal machine was soaking in a pool of water not far away, while Warburton and the detective were in hiding, each just within either end of the tunnel.

Warburton had the lower end—where the culvert debouched upon the low ground. It was in this direction that he had followed Grimsby several nights before to his rendezvous with the tramps.

Now he sat down upon a dry rock with his back against the wall, and held the pistol and the electric lamp before him while he waited. Warburton's mind was much harassed.

The fact that the criminal, Grimsby, was about at the end of his rope should have been a satisfaction to any man—to Bill Warburton most of all. But Warburton was not at all sure that he would be made glad by the fall of the villain.

With Grimsby in the toils, and his identity known, it would surely be Warburton's duty to step forward and tell what he suspected regarding the twenty thousand dollars that he believed Gage Mostyn had stolen two years before.

He dared not trust Jim Plaisted with

the whole truth about it. He dared trust nobody at all!

Suddenly he heard the rumble of a train. The midnight express for Corinth was steaming out of the yards. Soon she shrieked away, over his head, and then all was still again.

If the plotters were lurking near, expecting a terrible explosion at the culvert, their surprise, as the minutes ticked by, must have been great!

The man who had placed that infernal machine in the roof of the culvert would not return at once. For some time after midnight he would consider the vicinity of the culvert a most unhealthy locality!

As time passed, however, he must wonder mightily what had happened. The mechanism of the thing would be suspected. Now, it was just according to what kind of courage he possessed, whether he risked visiting the culvert at all. Warburton was sure of that.

He had good reason to know that Grimsby possessed a reckless courage that would balk at nothing. Despite the peril of doing so, the convict would not be satisfied until he knew what was the matter with the time-bomb.

A very cautious man might wait until the next night to make the investigation—until the clock must in any case run down—but Warburton had never seen much caution displayed by Grimsby. The man was shrewd and lucky, but not cautious.

The time of waiting passed very slowly for Warburton. It seemed to him as though it must be morning; but he dared not show a light and look at his watch.

Suddenly he heard a stick crack. He thought it was in the tunnel behind him at first; then a repetition of the sound assured him that the step was outside.

He clutched the gun and the lamp convulsively. He even held his breath as he waited.

Being inside the mouth of the culvert himself, he could see quite well outside. A figure came into view and approached him, the figure of a man who came in a stooping posture and entered the passage.

He was not three yards from Warburton —then two yards—then only a yard! Suddenly the watcher snapped on the power of the electric torch!

The light struck dazzlingly into the eyes of the fugitive. He gasped and shrank back.

Before he could speak or run Warburton was upon him. He took no risk. With his gun as a club, he beat the scoundrel on the head, calling loudly for Plaisted meanwhile.

The fugitive fell under the blows. Warburton lost his lamp as he leaped on the fellow, but the detective came running with his.

"I got him!" yelled Warburton almost hysterically.

The man under him lay still. Plaisted came panting to the spot and flashed his light upon the scene.

There lay the arch-villain—the bewhiskered Grimsby. His wig was disarranged, however, and there was a trickle of blood running from a wound over his eye. Warburton had beat him into unconsciousness.

CHAPTER XXIII.

The District Attorney's Office.

THE attempt to blow up the railroad culvert, at about the time the midnight train left Wildwood, stirred the mountain town to the dregs. Several arrests had been made, and the news could not be kept altogether secret because of these arrests.

Before the call-boy's round in the morning Jerry Farley was hauled out of bed in the railroad hotel by one of the sheriff's deputies and borne off to jail.

As one of the workmen in the railroad shops tried to pass the timekeeper just before seven in the morning, he was seized by another sheriff's officer and borne away.

The drawing of the warrants caused several people to learn the reason for the arrests, and soon the town was stirred with the story.

There was much more to it than a mere plot among some ne'er-do-wells to injure the C., B. and W. It was whispered that there was a far-reaching and villainous conspiracy behind the attempt to blow up the culvert.

The district attorney took instant interest in the matter, and some of the railroad officials, certain witnesses, and the arrested men, were brought into his office before noon for an examination. He was to make sure whether the evidence gathered by the railroad detectives was sufficient to bring before the grand jury.

The man from the railroad shops was in a panic. The prisoners were kept separate, and he was brought in for examination

first. He claimed to have known nothing about the attempt or plan to blow up the culvert, and even Plaisted admitted that the fellow probably told the truth.

The only crime this man had committed was making the box for a friend on the company's time and out of the company's material. Who was the friend?"

"Jerry Farley—Jerry, the dago!" said the man. "And if he was wantin' it for any such purpose as you say, may he get what's comin' to him! He got me into it—an' me as innocent as a babe."

He was sent away after a little questioning, and then Jerry himself was brought in. The conductor of No. 15 was evidently badly frightened. He was warned that anything he said might be used against him, but he seemed as eager to tell his part of the story as the former prisoner.

Farley's story, however, did not sound altogether true. When he denied more than casually knowing Grimsby, the arch-criminal, and said that he had merely got his friend in the shops to make the box as a favor to Grimsby, knowing naught of the purpose to which the latter would put the box, he was confronted with Warburton.

"Just tell the district attorney what you heard pass between Grimsby and this Farley one day in the caboose of No. 15, between Adams Cove and Paradise," said the chief of the railroad's detectives.

Warburton related briefly the conversation, and, encouraged by Plaisted, went on to tell of what had happened at Paradise curve after he and Grimsby had dropped off the train.

Farley was shaken now—badly shaken.

"Say!" he whined, "you ain't going to take the testimony of a bum like that, are you? Besides, nothing happened to the special at that curve any way. This Bill Warburton is an unholy liar."

"Go on, Bill," said Plaisted easily. "Tell the district attorney some more of your lies. They're mighty interesting."

Grimly enough, for he felt his position to be that of a spy, and mighty uncomfortable, Bill related the brief conversation he had heard between Grimsby and Farley in the culvert several nights before the actual placing of the infernal machine there.

This story completely broke down the conductor. He was taken away shaking, and Plaisted said significantly to the county official:

"You see what timber we're giving you. That fellow will give you all the evidence you need if we cannot finally prove connection between Grimsby and the time-bomb."

"You understand, Mr. Plaisted, that finding the defendant on the scene soon after you removed the bomb merely establishes the possibility of his having placed it there. Circumstantial evidence to a degree. But if this Grimsby can establish the facts of a good reputation—"

"Bring him in and let him face Warburton," growled Plaisted. "That's all that is necessary. Bill knows who he is."

"Mr. Warburton will swear to his being a criminal?"

"How about it, Bill?" asked the detective, and the young fellow nodded grimly.

"You can bring proof of your assertion?" demanded the district attorney

"I'll tell my story," said Warburton with a sigh. "You can prove it easily enough."

"Wait!" exclaimed the county official. "Let us have Grimsby in here while you talk. We'll face the accused with the accuser."

He rang a bell on his desk. When the officer came he ordered Grimsby brought in. The convict entered with his wrists ironed. As he crossed the threshold he swept everybody in the room with a black look. The last person to fall under his eye was Bill Warburton.

By chance, up to this time, Grimsby had not heard Warburton's name mentioned, nor had he seen the face of the man whom he believed had been burned to death by the yeggmen.

He fell back a step and his face, under the black beard, paled. They had removed his wig, and the oddity of the prisoner's appearance without it was now enhanced by his momentary fear.

"You!" he gasped.

Warburton looked at him grimly, but did not reply. Jim Plaisted chuckled.

"He identifies you, Bill, whether you know him or not. Remember our friend Warburton pretty well, don't you—*Gage Mostyn!*"

The prisoner had regained control of himself, however. He glared at Plaisted, and from the detective back to Warburton, but remained silent. But the district attorney came out of his chair.

"What do you mean, Plaisted?" he cried. "Gage Mostyn? The man who killed Knott two years ago?"

"Whom you sent up for ten years? The

same," said Plaisted. "At least, Warburton says this is he."

"Impossible!" cried the county official.

"And why is it impossible?" demanded Plaisted.

"Mostyn escaped, it is true, but he was lost in the swamp and was never found—"

"You bet he was never found," chuckled the railroad detective. "Out with it, Warburton. Tell the district attorney the story you told me."

Warburton had an attentive audience for the next few minutes. Even the convict listened attentively. But not by look or word did he admit the facts as Warburton related them.

The district attorney shook his head slowly.

"Unless you have corroborative evidence—

"Why, Mr. Warburton, why should this man, if he be Mostyn, come to Wildwood, the very place where he had committed his crime, and where he was so well known?"

"Say! that's puzzled me, too," muttered Plaisted, eying Warburton curiously.

The young man shrugged his shoulders and smiled.

"It is plain enough to me," he said. "But that is because I have always had a different opinion regarding the circumstances surrounding the paymaster's murder than the public—and *you*, Mr. District Attorney—seemed to hold"

"What is that, Mr Warburton?"

"The story generally believed—indeed, this villain intimated as much himself," and Warburton darted a sharp glance at Mostyn, "and for his own purposes, that he and Paymaster Knott were equally guilty of the robbery of the pay-car."

"That they were in cahoots—yep," said Plaisted. "Then they quarreled over the divvy."

"It was not so," said Warburton, with a shaking voice. "The villain gave that out as a ruse. He wished the public to think that Knott had hidden the twenty thousand dollars, too."

"Well?" said the district attorney. "This is very irregular, you know. I do not see that it proves that this prisoner is Mostyn."

"Wait! Hear me out," said Warburton, more calmly. "My belief is that this Mostyn and Paymaster Knott were never very friendly. Mostyn fastened himself upon Knott on the occasion when the paymaster came up here to discharge the workmen on the terminal works. He knew what a large amount of money was locked into the safe in the pay-car. The combination of the lock was known only to Knott.

"This Mostyn got Knott away from the car; got him into the back room of that café. There was no quarrel. Nobody ever testified that there was a sound from the room.

"This villain took Knott unawares and knifed him—killed him like a dog! He never gave him a chance for his life!"

Warburton rose up from his chair and advanced a step toward the prisoner, who merely sneered at him now.

"I know the black-hearted scoundrel! I know him for all he is!" choked the young man. He returned to his chair and continued:

"Knott was getting old; he was getting forgetful. Mostyn knew that the paymaster had the combination of the safe written down, and carried the paper somewhere on his person.

"He killed Knott before ever the safe was robbed, gentlemen—just as sure as Heaven is just, he did!" cried Warburton, shaking his finger at the convict.

"He first killed Knott, then robbed his body of the paper, then got into the car—for you will remember that it was after dark—and by aid of the figures Knott had set down, the villain opened the safe.

"He carried away the twenty thousand dollars—"

"But he was arrested before morning, Bill," interrupted Plaisted. "I arrested him myself."

"True. Therefore, he didn't carry the twenty thousand dollars far," returned Warburton. "And when he broke jail and escaped from the vicinity of the swamp, with my aid, and came up this way, he came back to get the treasure!"

The district attorney shook his head slowly.

"And why did he not get it, Mr. Warburton? That was some months ago. With such an amount of money in his possession, we won't presume that he would have remained here to blow up a railroad culvert."

"He did not get the money," said Warburton doggedly. "He has tried several times—"

Warburton hesitated. Mostyn flashed a glance at him—perhaps a surprised glance.

"Well, well, sir!" exclaimed the county official. "Go on."

"Mostyn buried the money under, or very near a little shack that stood on the trail not far from the mine shafts."

"By thunder!" exclaimed Plaisted. "You didn't tell me this before, Bill."

"No. But I didn't know it until lately."

"Do you mean the shanty that Old Jack MacCormack built for a real estate office when he tried to sell those hillside lots of his?" asked the district attorney.

"The same."

"Why, that's a part of Jack's house where he lives now!" ejaculated the railroad detective

"It is. And under the present dwelling of Jack MacCormack is where Mostyn cached the stolen money," declared Warburton in ringing tones. "I know he has twice tried to get into the house—to get into the cellar. Once two of the very yeggs that were with him when he thought he had disposed of me on a fire of railroad ties, helped him in trying to break into the house at midnight. They believed the daughter of MacCormack was alone in the house. But I was there. You villain! I thwarted you that time, didn't I?" he concluded, advancing upon the prisoner again.

He had succeeded in finding the crevice in the convict's armor. Mostyn snarled at him like a ferocious dog.

"So it was you, was it?" he growled

The district attorney slapped the table

"I'm satisfied," he said. "Your identification is sufficient. This man *is* Gage Mostyn—he practically admits it—"

"Aw, cut it out!" growled the prisoner. "You'd get wise to it in time anyway."

Then he whirled on Warburton again and shook his manacled hands at him

"So you're the feller that's so sweet on Aliene MacCormack, and who queered my play up there the other night? She's your girl, is she?

"Well, you're going to have a nice father-in-law, Bill Warburton. Put that down, bo! Old Jack is a dandy.

"I wasn't hep to it first, but I am now. It's a fact I planted the scads up there two years ago. They can't punish me for that—I've been acquitted on that count.

"And I come back here to get the stuff. That old sinner had built there. Then he started digging a cellar. What did he do first pop out of the box? Why, he found my money, of course."

Mostyn stopped for breath, and wiped his mouth with the backs of his hands.

"And now, the blasted old scoundrel is giving out that he's found a mine in the hills and is milking it on the sly.

"He's milking that pot I buried—that's what he's doing. If you want to recover the railroad's money, Jim Plaisted," concluded Gage Mostyn, "go to Old Jack for it—or to Old Jack's girl! If this Warburton guy is so sweet on her, I reckon he expects a divvy in it, too!"

He slumped back into his chair *and* turned his face away from them all.

For once Gage Mostyn had loosed the grip on himself.

There was silence in the room. Jim Plaisted and the district attorney were both looking accusingly at Warburton.

CHAPTER XXIV.

Old Jack's Crime.

IT was two hours later. Warburton had been excused from the district attorney's office. Plaisted had let him go without a word. The railroad detective had not even offered him a handshake

The change in the attitude of Plaisted spelled trouble for Warburton—the young fellow knew it!

The suggestion that Bill had known of the finding of the stolen money by Jack MacCormack, and expected to share with the MacCormacks in the use of the twenty thousand dollars, had plainly been sufficient to arouse in the mind of the detective all those suspicions he had had of Warburton before.

The young man plodded up the mountain trail in a much disturbed state of mind.

Why he was going to see Aliene he scarcely knew. He felt that somehow he must soften the blow that was about to fall upon the girl he loved.

He knew that the sheriff and Plaisted would be after MacCormack in short order. The old man would have to give up his ill-gotten gains. In the state of mind Jack was now in, Warburton feared there would be trouble.

Jack MacCormack had suffered so much bad luck in the past, and had evidently banked so confidently upon this newly acquired wealth, that the young fellow believed Jack might try to keep his dishonest wealth in spite of the law.

He had lived in the county long before there was any law save that of self-protection.

He had found the money on his own land, and that fact would be enough to make Old Jack believe that he had an inalienable right to it.

Bill Warburton came in sight of the MacCormack house, but instead of passing it on the trail he made a détour and reached the spring from which the family obtained its drinking water.

Fortune favored him for once. He beheld Aliene coming up the path with her pitcher before he had been at the spot twenty minutes.

But she was not tripping along lightly and singing as usual. The girl's pretty face was much overcast; her eyes were heavy and red from weeping. Her gait was listless.

As she stooped to dip the pitcher into the clear water Bill stepped from concealment and put one arm around her softly, while he took the pitcher from her hand.

"Oh, Bill!" she murmured. Her lips twitched and her hands went to his shoulders to steady herself.

Suddenly, in abandonment of spirit, she cast herself against his breast and clung to him, crying and sobbing in a way that shook Warburton dreadfully.

"Oh, Bill! Bill!" she cried, between these outbursts. "What shall I do?"

"What will you do about what, Aliene, my girl?" he demanded. "What has happened?"

"It's father—father!"

Instantly Warburton's suspicion was awake. She had learned where their new-found wealth came from!

"What's the matter with Old Jack?" asked Warburton, in attempted cheerfulness

"It's the gold, Bill—that awful gold! He must be mad—mad! He'd sell his soul for it."

Warburton was silent, and she pursued:

"I knew he must be trying to fool even me about the locality of that mine he talked about," sobbed the girl, "and I soon had the feeling—soon after I came home—that all was not right about it. Oh, how thankful I am that I never would touch a penny of that money.

"I had a little saved up from my wages, and there was some in the bank in my name, left from the old days when daddy was doing well. Every penny of this is safe."

"The whole twenty thousand dollars?" said Warburton.

"I don't know how much there is. Perhaps there's more than that," she replied.

"No. There can be no more, Aliene. Probably a little less."

She stopped crying and took a step back so that she might look up into his face.

"What do you mean, Bill?" she demanded.

"You know, in the exchange he'd naturally lose a little. There couldn't be the whole twenty thousand dollars," said Warburton softly.

"What twenty thousand dollars are you talking about?" she cried.

"Why—the money belonging to the railroad company."

Aliene stared at him, and her amazement was only too evident.

"*What* money, belonging to *what* railroad company?" she demanded. "Are you mad, too, Bill Warburton—or am I?"

Warburton saw that he had got in wrong somehow, but once in, he determined to keep on to the bitter end. The girl must be told of her father's wrongdoing.

"Neither of us are mad, Aliene," he said quietly. "I—I am afraid that your father has done a mad thing—that is all."

"What do you mean, Bill? You and I are not talking of the same thing."

"I am talking of the money that your father has dug out from under the house yonder," blurted out Warburton.

"You mean the gold?"

"No. I mean the cash money—the money with which he buys that gold he shows you, and then sells to the mining company here."

Aliene was pale, and her eyes opened widely. She shook her head slowly.

"Bill, dear, I hear what you say, but I don't know what you mean," she said.

Before the young man could speak again Jack MacCormack's voice was heard roaring from the direction of the house.

"Oh! what's happened now?" cried the girl, and started to run down the path. Warburton dropped the water pitcher and ran with her.

Before they came to the clearing in which the cottage stood there was an explosion.

"Daddy's shotgun!" cried Aliene.

Then a door slammed and they heard other voices. They came to the edge of the wood. The window-shutters of the cottage were closed and so was the side door

"He's locked himself in," muttered Bill.

"He keeps the window-shutters closed all the time. We live in a state of siege," said Aliene brokenly. "I—I believe he *is* mad, Bill. Poor, poor daddy!"

"Who is he afraid of?" stammered Bill.

"Everybody. He fears every passer-by will find his mine—"

Find his mine? You mean the hidden money—"

There was some disturbance at the front of the house. Bill broke off suddenly and started in that direction.

"Look out, Bill! he might shoot you! He—he is not responsible!" cried the girl.

Warburton reached the corner of the house. Before its front door stood Plaisted, the sheriff, and two deputies. They were parleying with Old Jack, who had the front door open on its chain.

"Come on, Jack," the railroad detective was saying. "No use acting this way. We've got you where the wool's short—"

With a snarl MacCormack thrust the blue barrel of a pistol through the aperture and fired. One of the deputies screamed and jumped about, spitting blasphemy and holding on to his bleeding ear.

Then suddenly, without an order from his superior, the wounded man flashed a pistol from his belt and fired at the aperture. There was a shriek from Aliene, who was looking over Warburton's shoulder. She had seen her father sink to his knees and then fall outstretched upon the floor.

The sheriff knocked his deputy down. But it was too late. The harm was done.

Bill had caught Aliene or she would have fallen, too. Plaisted rushed forward, and thrusting his arm between the door and the frame, unhooked the chain. He swung the door wide open and stepped softly within, removing his hat. The sheriff did likewise.

It was all over with old Jack MacCormack. The deputy's pistol-ball had plowed its course directly through his brain.

Warburton led the girl silently into the house. The rough men stood awkwardly by as the daughter, dry-eyed, knelt for a moment by Old Jack's body.

"You did not deserve this, daddy—you didn't deserve this, no matter what you did," she murmured.

"'Twas a mistake, Miss Aliene," said Plaisted. "None of us had it in for Old Jack. He'd done wrong—yes. He'd broke the law. But we only wanted—"

The girl got up suddenly and faced him.

"What have *you* to do with this, Jim Plaisted?" she asked. "Are you working for the mining company?"

"For the railroad, you mean, Aliene," he said in his usual gruff way. "Your father found that twenty thousand dollars that was lost the time Paymaster Knott was killed, and has been tellin' us all that the money come from a pay-streak he found—"

"You're crazy, Jim," interrupted the girl sharply. "Father never found any money."

"What! Didn't he find the money stolen from the railroad pay-car two years ago?"

"No, he didn't."

There was a dead silence for a moment. Even Warburton could not speak. Finally Plaisted asked slowly:

"Are you positive of that, Aliene?"

"I am. I tell you this money we have came in no such way."

"Do—do you know what it means, Bill?" asked the railroad detective of Warburton.

"No. But if Aliene says her father didn't find Mostyn's cache, then it's a fact."

"I give you right there," murmured Plaisted. "The stuff isn't found, then. But poor Old Jack—"

He and Bill lifted the dead body of the father of Aliene and laid it on the bed. Then all but Bill and the girl tiptoed out of the house.

CHAPTER XXV.

Wildwood Awakes.

IT was the day after Old Jack's funeral that Jim Plaisted met Bill Warburton by appointment at the little cottage on the mountain trail.

The funeral had been attended by more than half the town, for Old Jack, after all, had been well-beloved. That his brain was turned at the end, and he was shot in self-defense by a sheriff's deputy, made no difference to the feelings of the great body of his fellow citizens of Wildwood, the men who had known Jack MacCormack in his better days.

The matter of the missing twenty thousand dollars was not revived. The public had not been made aware of the story Grimsby, or Gage Mostyn, had told the district attorney, and the mystery of the gold MacCormack had found was still a mystery—at least to Plaisted.

"I'm banking on your playing us square,

Bill," said the railroad detective. "I see well enough that the old man didn't find Mostyn's loot—and neither the girl nor you have got your hands on it."

"You are right, Plaisted," said the young fellow gravely. "And if the twenty thousand dollars was hidden here, as I believe, and Grimsby declares, it is still here. Miss MacCormack gives you permission to tear the cottage down if necessary, to find the railroad's stolen money."

"Well, that's all right!" grunted Plaisted.

"But I've got something to show you, Mr. Plaisted—and that, likewise, is by Aliene's order."

"What's that?"

Bill did not answer, but beckoned the detective to follow him into the kitchen of the house. There Bill moved back the table and opened the cellar-trap.

There was a ladder leading down into a square, deep shaft. Bill procured a lantern and led the way down the ladder.

"You understand," said the young fellow softly, "that Old Jack quite innocently started to dig a potato cellar under this cabin. He started from the outside—not here under the kitchen."

"Well?"

"He didn't find the money that murderer hid, but he struck traces of something that assured him that there was gold here."

"Wow, wow! says the fox."

"He found, indeed, a vein of gold—a pay-streak of varying width, which is doubtless a part of the pay-streak that is now being mined up the hill by the Wildwood Syndicate."

"I see," muttered the railroad detective.

"You see what the old man did, Plaisted," said Warburton. "He was not quite right in his mind. He worried about his poverty and because Aliene had to work for her living.

"He was tempted to hide his discovery, and so filled up the entrance to his cellar outside the house. Then he made this shaft, removing the dirt at night—doing all the work at night, in fact.

"He gave out the story of the mine he had found in the hills so as to have Aliene come home to him, and so that she might stop work. But he could not take her into his confidence, for, you see, the gold was not his."

"Not his, Bill?"

"No. Not a penny of it really belonged to him. All that money in the bank—and there is near twenty thousand dollars of it—Aliene will give back to the rightful owners of the gold.

"You see, Plaisted, Old Jack only owned the surface rights of this land here. He long since sold to the mining company all mineral rights in these holdings. So the money he sold the gold for goes to the syndicate."

"And it's a shame!" ejaculated the railroad detective. "The girl's fair destitute then?"

"Not while I've got a pair of hands to work with, she isn't!" exclaimed Warburton, as he flashed the lantern upon the rude workings Jack MacCormack had made beneath his home.

"Aliene has been good enough to say she'll marry me—when I get my job back with the railroad company," he added, with a laugh

Plaisted remained glumly silent until they crept back to the kitchen again. Then he scowled at Warburton.

"I've known that girl since she was knee-high," jerked out the detective. "I want her to have a square deal, Bill. Say, does she know who you are?"

"She knows who I am—yes. She knows why I have been so anxious to straighten out this matter of the railroad's lost money and to capture the scoundrel who killed Paymaster Knott.

"At first," said Bill brokenly, "I thought I had no right to speak to Aliene of marriage while this cloud hung over me. You know well enough, Plaisted, that I was driven out of the employ of the railroad under my own name, and couldn't get a job elsewhere. You hounded me, Plaisted!"

"Well," grunted the detective, "I thought I was right."

"And you hounded my mother and sister. Because you were doing your duty is the only reason I forgive you. But that's all right. It isn't what I was getting at. Aliene knows all about that. My mother and sister came up from Corinth to the funeral, and are with Aliene now.

"When the girl heard all my story she said that the mere suspicion that smirched my father's name, and hung over me, wasn't as bad as the certainty that her poor, misled father had really committed a crime. So—well, whether the railroad's twenty thousand dollars is found under this house or not, Aliene is going to marry William Warburton Knott!"

"That's sure a whole mouthful," said Plaisted with a grin. "I think I'll continue to call you Bill—and I bet she does!" Then he laughed aloud. "I got a hunch that the railroad company's money is going to be found, too, Bill. You leave it to me."

Plaisted proved to be a sure enough prophet. In two days, and after tearing down a portion of the new end of the MacCormack cottage, the detective and his helpers found the tin cracker-box in which Gage Mostyn, alias Grimsby, had buried the money stolen from the pay-car's safe at the time William Knott's father was murdered.

The money was intact. Paymaster Knott's memory was cleared of suspicion. The young man, who the railroad people at Wildwood and up and down the C., B. and W. had known as "Bill Warburton," was complimented warmly on his part in the clearing up of the mystery and the capture of Gage Mostyn.

Bill was busy just then, however, getting his trousseau ready! At least so he told the boys. He and Aliene were quietly married at once

Only the next week No. 15 started out of the Wildwood yards at her usual time, but with a new con in the caboose.

"Not that I deserve to be jumped, boys," said Bill, "and I hope you'll forgive the old man's favoring me this once. We all want to pull together for the C., B. and W., and knocking never built up any business."

His crew welcomed him, however, with a cheer. Bill Knott was likely to become quite as popular a railroad man as "Bill Warburton" had been.

But the C., B. and W. was about to enter upon a new era. The misfortunes that had beclouded its career were suddenly and effectually swept away.

All because of something that Jim Plaisted had found in the pocket of Gage Mostyn when he searched that scoundrel at the time of his arrest in the railroad culvert.

The murderer was tried with Jerry Farley for the attempt to blow up the culvert, and both got long terms, after serving his share of which, Mostyn would have to serve his unfinished term for murder.

When the dust of this trial had subsided the papers found upon the convict, and which had been turned over to the C., B. and W.'s officials, were brought to the attention of certain officers of the Denver and Pacific lines.

They were very incriminating letters, and they connected certain other officials of the D. and P. with the attempts to injure the C., B. and W. property.

The outcome could easily be foreseen. The C., B. and W. had its enemy *right*. The D. and P. suddenly ceased opposing the short line, and in six months the connection from Wildwood to the western tracks was completed.

Wildwood was a real junction—it was no longer the jumping-off place.

Bill and Aliene had managed very nicely on his pay-check, but with the improvement and extension of the C., B. and W. all that Old Jack MacCormack had ever hoped for Wildwood began to come true.

The real estate holdings that had been left Aliene by Old Jack were once more salable. She began to add to her bank account by the sale of lots.

The day came finally when she could say to Bill:

"You can jump that job on the freight if you want to, Billy boy. We're going to be rich now—honestly rich."

But Bill Knott wasn't that kind. Besides, he liked the business. He wanted to work up and show what there was in him.

There's always a better job ahead for a railroad man—that's why the profession attracts the live ones.

And the time will come when William Warburton Knott may write G. M. after his name.

(The end.)

MELON TRAIN OVER MILE LONG.

THE transportation of melons from the Imperial Valley during the past season is considered one of the most remarkable crop movements in the history of the Southern Pacific Railroad. The total number of cars shipped was 2,700, which is about 900 more than in any other season. The biggest day's packing was June 11, when 133 car-loads of cantaloups were harvested and transported from Brawley, the shipping center, to Imperial Junction, in one train, the length of which was 6,175 feet. There were 324 crates in each car and 45 melons to the crate, which makes a total of 14,580 melons to each car, and 1,939,140 melons on the train. The amount of ice required to take care of the shipments was 56,000,000 pounds.—*Popular Mechanics.*

On the Editorial Carpet

Merry Christmas to All the Boys and Their Mothers, Wives, Sisters, and Best Girls, from the Editor and His Diamond Pusher.

THE "WHITE HOPE" SPECIALS.

WHEN Jack Johnson and Jim Jeffries met at Reno last year, and Jack divorced Jim from his title, it looked as if there wasn't anybody left to make Johnson prove his right to hold the pugilistic number-plate. But the arm is up and he had better look out.

Two big fighting specials are bearing down on him and one of these days he may find himself in the back shop badly in need of repairs. If we have a "white hope," he is probably one of these two railroad men: Jim Flynn, of Pueblo, Colorado, or Carl Morris, of Oklahoma

Jim was once a fireman and he shows it. He carries a pressure of 186 pounds and stands five feet eight inches from pilot to tender-trucks. He has heaved fuel for many a mile, and above the boiler is built like a Mallet compound

Morris, who used to be a hogger, is the biggest scrap-heap in the business. He stands six feet four inches in his corns and has a weight on his drivers of 236 pounds

Both men have made good runs in the punch division and are traveling at a pace that ought to land them in the championship terminal

One of the biggest events in the sporting world for some time, was the meeting of Flynn and Morris in Madison Square Garden, New York City, last September

A crowd that almost burst through the walls squeezed into the amphitheater at prices that were pushed much above the average. Friends of both men came from their stamping-grounds to witness the go—a ten-round run, with about $20,000 in the baggage-car.

Morris was heavily backed and was considered the favorite, but Flynn had the right of way all along the line. The engineer didn't seem to be able to control his driving-wheels and they spun on the track without him making any headway. His steam ran low and the fireman soon had him on the down-grade.

Flynn was clever in side-tracking and hitting the high places. Before four rounds had passed, Morris looked as if he had climbed the rails into a ditch. Morris had plenty of pressure in the beginning, but his valves leaked and there was no force behind his pistons. He was ready to go to the roundhouse for an overhauling when the fight ended.

Though Flynn's speed made Morris look like a switching-engine, the engineer has the equipment. If he keeps his hand on the throttle and the Johnson bar and watches for the "clear," he ought to be able to put over a toot that will send Johnson onto a siding.

Flynn seems to look like a main-line machine just now, and perhaps, after all, if any one backs Johnson off the rails, he'll be the man.

ROMANCE.

THERE was a deplorable sneer in the letter of the correspondent who not long ago told us that there is no romance in railroading—that it is a game of stern, hard work. Still are we optimistic, and thrilled by the word "railroad."

To live well and express the best that is in us is stern, hard work; yet there is plenty of romance in life

Romance is the complete picture; realism is its parts. A wonderful painting is, after all, only a product of oil and colors and canvas and brushes; but it is a wonderful painting.

So with railroading

Men soil their hands; wear overalls; face grave dangers; are fretted by perplexing problems, nevertheless it is a stirring picture

And there *is* romance in it

FINE FICTION RUN.

WITH this Christmas number of the RAILROAD MAN'S MAGAZINE, one of the longest and most successful fiction specials that was ever given its clearance over the main line of a magazine system, reaches its first terminal.

Almost from the beginning, our friends, Honk and Horace, have kept the laughter-valve tied down to the last notch. We doubt if their equal as smile-generators has been produced in the shops of any other magazine in this country

during the past five years, and the man who handles the editorial throttle in the cab of this publication has seen some going in the literary line

We have had letters from all parts of the world telling us that Honk and Horace were the yellow-painted pay-car of literature, the one thing that could make people laugh without reducing speed or looking for a stop signal

But they have reached the end of their first division. The question is this, boys: "Do you want more of them?"

Emmet F. Harte has a new string ready to couple onto our train. They are just out of the shops—bright, new, funny.

It's up to you to let us know

A postal card will do it. If you are in favor of the new Honk and Horace series, just cast your vote on a postal card and let it come this way

A TRIPLE MALLET.

THE world moves onward at a dizzying rate Progress seems to be the key-note of every phase of our activity

In railroading, the devices of to-day are the scrap-heaps of to-morrow

When the first Mallet compound was built, it seemed that at last the limit of locomotive construction had been reached and the original Mallet would remain the largest engine on the rails

But there is being planned a Mallet which will exceed in size anything railroading has ever known It is a triple Mallet. The engineering department of the Santa Fe is superintending its construction

"Within a few years we expect to have a triple Mallet, and when this is completed, there seems to be no obstacle to having four engines coupled into one," said Mr. C. T. Ripley, the Santa Fe's assistant engineer of tests, in a recent interview. "The present Mallet can pull 10,000 tons, and we expect to double this. The time is not far distant when such motive-power will be needed '

Mr. Ripley's statement certainly points to the conclusion that we are still very far from the last word in locomotive building.

Where will it end? Who can say?

SETTLED DOWN.

FROM bo to benedick is a long jump, but the following from a very interesting letter from one of our old-time readers will explain why he gave up free-riding for the more comforting and exclusive life of a job in Georgia with a charming wife to keep the little home—a haven to which we commend all others whose freshly inscribed monakers adorn the sides of the O'Briens and the fences of the rights-of-way. Our friend says

EDITOR, RAILROAD MAN'S MAGAZINE:

IN December, 1902, I beat No. 9, passenger, two hours late, double-header, from Salinas to San José, California. The front shack didn't carry free passengers, and he made it extremely interesting for me till I hit Gilroy, about sixty miles away

At Gilroy I had an idea. Just as she pulled out, I hopped the pilot of the second engine and rode to San José, a thirty-mile trip

I went to sleep part of the way. I always do on the road. I can't help it. The tender in front of me kept the wind off, and the boiler behind me kept me warm.

The front shack saw me on the platform in San José, and his curiosity to find out where I rode made him cough up two bits to learn.

It was funny to see his face when I showed him. I am well known in San José, having lived in that town off and on for six years, between trips to different parts of the world

I left San José November 2, 1910, and arrived in Greensboro, North Carolina, December 5, 1910, a total distance of 3,312 miles. I traveled on freight all the way—under steel bellies—and that made me swear I would never hobo it again

By the way, how many of your brakemen readers know that the P. F. E., and certain U P., S. P., and I. C. cars can be ridden underneath if a man knows how to ride the frame on the air-cylinder of a steel-frame car. But you can't do this stunt on a Pennsylvania car

Not many boes ride there, and not many shacks are wise, but I've ridden the frames since 1903—my first trip of any length riding that way, was from Mobile, Alabama, to San Francisco, California, 2,635 miles, from 7 P.M., March 7, 1904, to 4 A.M., March 30, 1904.

I held one car down 481 miles, and another 506 miles. I wrote under the floor on each car where I got on and off, and kept tally of what time I made in a note-book as I made it, for I was rather gone on a girl in Frisco and took a sudden notion that I wanted to see her. Somebody else had beaten me to her, however, so I had my trip for nothing

I never was a yegg, and never associated with any one that I thought was a "John." I didn't fancy even being with "gay cats" much.

I traveled alone as much as possible. I was pinched for "vag and no visible" several times, but the most I got was ten days in Riverside Park, San Antonio, Texas, and they cut that to eight because I was willing to work.

I never broke a seal, never had any trouble with shacks, or damaged or stole property of any kind—except fruit in California.

I just rode. I'd stay six or twelve months in some place, get spring fever, and hit the road. I am a pretty good ice-handler on fruit-cars.

It's getting harder to ride side-door Pullmans every year. Cars nowadays have no bumpers to speak of, no rods, no end-doors, and the shacks are something fierce compared to what they were eight years ago, when I first started

Besides, the laws are getting harder. Ninety days in North Carolina, four months in Connecticut, and frequently as much as nine months on the county roads in this State is not a joy.

Why, last fall you couldn't ride for money even from Yuma to Fort Worth, Texas, because some fool kid killed a fly mug in Gild Bend That burg used to be a cinch to get out of once Now it's fierce

In Fort Hancock, Texas, last November, I saw three Chi punks get off a freight. Two drunken cow-punchers made them dance with an orchestra of steel-jacketed .44 bullets under their feet.

Man alive! those punks sure did hit the next drag East. They caught the sides, and she was going so fast that their feet hung out like markers.

Those punchers didn't shoot at my feet, but they commanded me to dance. I don't know how, but the point of a .44 revolver produced one of the fanciest cross-compounds of all known dances that you ever saw. About one minute appeased them, and I was let go in peace. I never did have much use for drunken cowboys anyway.

I'm married now and have settled down.—A C. G., Newnan, Georgia.

O'SHEA'S SONG.

LEO M. O'SHEA, an old-time stinger, who sat for years in the perch of the dog-house and now holds down a claim at Danton, South Dakota, contributes this month the following song of his own composition. On many an occasion Mr. O'Shea's mellow voice has cheered the boys when the nights were cold with these wholesome stanzas of

THE JIM RIVER LINE.

ME and my pal for Aberdeen were bound
To work for old Flannagan and sleep on the ground;
We got to Aberdeen, and no place to lie,
And with alkali water, I thought we'd die,
And an old box car looked pretty fine
To make us a flop on the Jim River Line.

We hit the super and master of trains
And got a job on account of our brains.
We made our first trip on a bright summer day
And signed up for a pie-card, as we wanted to stay,
And everything but the chuck was fine
As we swung the bright lantern on the Jim River Line

Old Bob runs a café, and I'm sure it will pass—
Sells alkali water at ten cents a glass,
Cigars made of cabbage, but which smoke pretty fine
As we pull the rusty pins on the Jim River Line.

Ike Apple runs a store out on the hill—
You could buy all that's in it for a two-dollar bill
He has overalls and jackets and shoes that won't shine,
But he'll trust you while you work on the Jim River Line

Flannagan came to our caboose one morning in May
To hunt for some whisky that had gone astray,
We said, "Mr. Flannagan, go hunt through the 'gine,
For they use it 'stead of water on the Jim River Line."

We pulled the pin and for the West we did strike,
In search of more trouble that the boomers like—
But we fought a small battle under Gillick and Ryan
As we drove the "no bills" from the Jim River Line.

ANSWERS TO CERTAIN SIGNALS.

WILL the gentleman who wrote under the interesting cognomen of "From Missouri," regarding the article in our September number by Pierson Macintosh, kindly send us his correct name and address and we will be pleased to correct the impression under which he is evidently laboring.

We would also like the correct address of Mr. Pete Cush, who wrote from Hamlin, Texas.

J. H. H., Clinton, Iowa: "Tower 'D C'" is a railroad *novel*, therefore it is *fiction*. We are quite certain that you were not intended as the character of the hero. Glad you like it, however.

IS IT THE RECORD?

EDITOR, RAILROAD MAN'S MAGAZINE.

A SHORT time ago, you stated that the fastest long-distance record for passenger-trains was held by England with a speed of something like fifty-six miles per hour.

I am enclosing the figures of a passenger run which I think holds the record for being the fastest long-distance time made by any railroad in the world, bar none. Will you kindly tell me if this is true?

The train referred to is a new Michigan Central, No. 48, the "Detroiter," between Detroit and New York City. This train leaves Detroit at 6.40 P.M., and Windsor, Ontario, at 7.58, arriving in Buffalo at 12.01 A.M. Excluding the five-minute stop at St. Thomas, it consumes 238 minutes between Windsor and Buffalo. The distance between Windsor and Buffalo is 248.75 miles, making an average of 62.4 miles for the *entire* distance. Is this the record?—RALPH P. HEALD, Portland, Oregon.

Mr. Heald is slightly in error. We did not say that the "long-distance record for passenger-trains was held by England." What we did say (page 476, August number) was this: "The most noted long-distance non-stop run in England is that between London and Plymouth, 225¾ miles in 247 minutes, an average speed of 55 miles per hour."

A speed record was broken on the Pennsylvania Railroad on September 16, last, when a test train covered the 105 miles from Valparaiso to Fort Wayne, Indiana, in 80 minutes. The real time was 84 minutes, but a four-minute delay was caused by a milk-train at Hamlet.

The test train was drawn by a monster stoker-equipped engine and consisted of ten coaches, each weighted down with 40,000 pounds of rails to bring them to standard weight.

Besides the stoker, the superheater-equipped engine is being thoroughly tested and apparently has been found satisfactory, though the road officials divulge nothing concerning the tests, which are really efficiency tests. The eighteen-hour flier covers the distance from Valparaiso to Fort Wayne in 105 minutes.

MORE "MIRTH IN MUDDLED MORSE."

EDITOR, RAILROAD MAN'S MAGAZINE:

THE message probably was written like this: "No. 43 has A. P. H. 6,238 horses for Salem, Ore., by express."

The copy that reached my desk made this amazing announcement: "No. 43 has a P. S 6,238 horses for sale. More by express."

This one being fresh from the telegraphic griddle, answers with exceptional force my gentle Ottumwa, Iowa, critic. What kind of a check clerk would catch the muddle in that case?

Now for True Story No. 61½:

My friend, B. L. Sperry, chief despatcher of the Spokane, Portland and Seattle Railway, recently engaged a young woman as stenographer.

Up in this beautiful country where winters are rigorous—except, of course, in sunny Spokane where Providence deals out the frost with especial gentleness in winter and the sunshine with exceptional generosity the rest of the time—railway managements provide machinery of special design with which to combat the whims of nature.

One of these items of equipment is a "dozer" "Snow-dozers," "mud-dozers," and so on, occupy important places and perform notable functions in railway operation

Sperry's discovery was ruminating over a batch of correspondence in connection with putting in shipshape for the approaching winter the snow-fighting appliances now in storage.

"Is," she guilelessly inquired as she scanned the general superintendent's letter, "that dozer a sleeping-car?"—STEPHEN H. BROWN, Spokane, Washington.

STUCK TO HIS POST.

WE are indebted to Mr A. G. Hawkins, of Waco, Texas, for the following information of a brave engineer who stayed in a critical moment:

On August 28, train No. 3, a west-bound passenger on the Texas Central Railroad, pulled by Engine 112, in charge of Conductor J. H. Andrews, with Charles Neill at the throttle and Harvey Pearson shoveling the black diamonds, was making its regular run. A heavy rain had fallen all night on the west end where there had been a protracted drought for two years.

All was well until mile-post 183 was passed. Half a mile further, Charley Neill's eagle eye discovered a kink in the rail where a filled-in bridge had once been. Calling Harvey, he told him to jump. Disregarding all fear of danger, Neill applied his air-brake, started his sand, reversed the engine, and went in the hole with old 112. The tank turned over on the engine, the baggage-car flew over the washout, and the smoker piled on the tank.

Charley Neill was found buried in the mud under the drivers of the 112. He was alive, with only a finger of his right hand broken and some bad bruises on his head and body. But for the desperate manner in which he risked his life to stop, all the passengers might have been killed or injured.

We thank Mr. Hawkins for sending the above. It is not only interesting, but we are glad to record so worthy an achievement as that of Charley Neill's. Who can send us another? Keep them coming, boys!

WITHOUT LOCOMOTIVE CHANGE.

EDITOR, RAILROAD MAN'S MAGAZINE:

YOU gave as the longest passenger run, the Baltimore and Ohio, 211 miles, and asked for a better one.

The engine-crew on the Gainesville division of the Atlantic Coast Line run from St. Petersburg to High Springs, Florida. In summer the run is 214 miles, and in winter it is 217 miles. The train-crew runs through to Jacksonville, 270 miles. This train works local.

I used to "shovel the pebbles" myself, and would like to ask if you want any more evidence to show that hoghead from Texas. If so, give me running orders and a clearance and I will give him some stories he will understand—L. D H., St. Petersburg, Florida.

WHO'S MOST IMPORTANT?

EDITOR, RAILROAD MAN'S MAGAZINE:

I HAVE read your wonderful magazine ever since the first number was printed. I have every copy filed away and I will never fail to be on hand on the 10th day of every month to get my copy. I have often wanted to have my little say in "The Carpet," so here goes:

The most dramatic things are not necessarily the most important in the railroad world. It is hard to say just who or what is the most important element in railroading, but if the blue ribbon must be awarded, it will probably have to go to some quiet office and to some quiet, four-eyed chap with a weakness for figures.

This man usually does not know a reverse-lever from a coupling-pin, and is a bit nervous when the speed gets above forty miles an hour He takes the slower trains so as to be comfortable—and figure. Let us see what he figures about

First he figures what a raw country will produce, next, where that produce can be marketed, and if it can be marketed at all. Then he figures grades, bridges, and tunnels, and last, but most important, he figures what percentage the railroad will pay on the money invested in it—and where that money can probably be had. Without this man there would be no railroad

Let it not be supposed that one man with a lead-pencil and a handful of scrap paper does all this figuring. His kind is numbered by the tens of thousands in the railroad world, from the forty-dollar-a-month clerk to the president.

He is the station-agent, the freight solicitor, the claim-agent, the lawyer, the stenographer, the car-painter, the industrial agent, the advertising man, the real-estate agent—in fact, this page could be filled easily with his various titles.

This man, in his numerous parts, often does not see a railroad train for months at a time—yet he is intensely interested in the railroad business every hour of his working day. He frequently sits from ten to twelve hours a day in an office-chair or on an office-stool just as if he were in a bank instead of in a railroad office. He uses good English—in fact, he must, in most cases, to hold his job—and he is very often a college graduate.

This type of railroad man is not in the public eye, yet he is really the man who runs the road. One stroke of his pen places $100,000 worth of advertising, buys a hundred engines, ten thousand tons of rails, or erects a bridge. Then, again, he spends his life working out rates between Podunk and Liverpool, between New York City and Red Dog, Texas.

All honor to the man in the greasy cap up in front, all honor to the man in the blue clothes with the punch, but let us not forget the hundreds of thousands of railroad men who get seasick when on the rear end of a fast train, to whom a railroad means only millions of sheets of paper covered with little black marks.

Just as there is something splendid in the rush and roar of a flying train, or in the sullen grind of a mile of freight going up-hill, so is there something very subtle and alert, very keen, intelligent and alive, in the quiet, crowded offices where the only signal is the buzzer, and where the railroad man leaves his desk only to eat and sleep.—LEE S. BENDER, New York City.

CAR NO. 123456.

EDITOR, RAILROAD MAN'S MAGAZINE

A FEW months ago I noticed you were tracing the movements of Car I. C. 12345. I think we have one that beats it. Car 123456 of the St. L. and S. F., arrived Ashdown, Arkansas, on No. 548, September 25, 1911. Forwarded on No. 554, September 26, with merchandise for Hope, Arkansas. I would like to hear more of the movements of this car.—C. B. W., Ashdown, Arkansas.

AMONG THE MISSING.

WILLIAM E. HAYES, 703 Washington Avenue, Greenville, Ohio, notifies us that his father, William Patrick Hayes, has not been heard from for six or seven years. He was known to be working on a railroad near San Francisco. His family would appreciate any information regarding his whereabouts.

We are requested to ask for information about James Evans, who was employed as a lineman on the government telegraph in the Canadian Northwest. When last heard from, he was located in Dawson City. Information is wanted by his nephew, A. Pantry, Wychwood, Toronto, Canada.

Does any reader of this magazine know the present address of J. W. Ruckman, age 55 years, height, 5 feet 7 inches, weight about 150 pounds; complexion, light; eyes, blue. He was last heard from at Rio, Arabia County, New Mexico, and at Little Rock, Arkansas, where he was working on the St. L., I. Mt. and Southern. Notify Samuel Ruckman, Box 96, Okanogan, Washington.

OLD-TIME POEMS.

BY SHANDY MAGUIRE

THROUGH the kindness of Mr. George W. Aldrich, of Jonesville, Vermont, we are able to fill this corner of our magazine this month with two more poems by the well-known railroad poet, Patrick Fennell, whose pen-name, "Shandy Maguire," was a household word to the railroaders of a generation or so ago. Through Mr. Aldrich's courtesy, we have secured others of Shandy Maguire's poems. They will appear from time to time in these pages during the coming year.

TO THE MEMBERS OF THE B. L. E.

SOBRIETY stands as our motto the first,
And ever by us must be cherished,
Remember, dear brothers, intemperance is cursed,
And thousands, by drinking, have perished
Touch it not—taste it not—handle not, then,
The cause of much sadness and weeping.
But true to our motto, we'll prove ourselves men,
And future rewards we'll be reaping.

Sobriety, beautiful gem of my soul!
While life has a thought worth possessing,
I'll prize thee, and keep thee within my control,
And give thee my fondest caressing,
I'll shield thee from all that tempestuous crew
In alcohol's stormy dominions;
I'll bear thee aloft through the firmament's blue
When departing on fetterless pinions.

Dear brothers, a glance will suffice to discern
The wreck on life's river now sailing,
Swept on by the tide to that mournful bourn,
Companioned by weeping and wailing.
So touch not the cup that is garnished with crime,
The cause of wide-spread desolation;
Although it may beckon with gestures sublime—
Concealed in its depths there's damnation.

Aloft, then, our banner we'll wave to the sky,
And rally around it like true men,
The public pays tribute to those who can die
When sober on duty, like you, men.

Our Brotherhood, then, will survive every shock,
  Erected on such a foundation,
And stand through the future, its base on that rock,
  And point us on to salvation.

"ONLY A TRAMP."

"HE'S only a tramp," said the papers,
  When telling the news of the day,
  Of how a poor man was discovered,
  Just breathing his last by the way.
And that was the epitaph written;
  And scarcely his spirit had fled,
When many around him had gathered,
  To morbidly gaze on the dead.

Messieurs, let us pause and consider,
  Right here o'er his mortal remains;
A clue we, perchance, may discover,
  'Twill be a reward for our pains.
From whence had he come, and bound whither,
  His birthplace, and name to denote,
What's this? Ah! messieurs, 'tis a letter
  Concealed in the breast of his coat.

We'll read: "My dear husband, this letter
  I write to you, hoping 'twill be
Another strong link in love's fetter,
  Which binds you so closely to me;
My heart's dearest throbs of affection
  I send to you, darling, and pray
Kind Heaven, for health and protection,
  And speedy success on your way.

"Our children are silently sleeping,
  I many times kiss them for you;
But Freddie is ailing from weeping,
  And baby is troublesome, too.

Yet, cheerfully, darling, I'll labor
  Till you some employment secure,
I'm helped by a kind-hearted neighbor,
  Who feels for the friendless and poor

"This morning our Jennie ran sprightly
  To kiss me, she whispered me: 'Ma,
Kind angels converse with me nightly,
  And give me good tiding of pa.'
God favor our little romancer
  With virtuous dreams all her life,
Impatiently waiting your answer,
  Your faithful, affectionate wife"

Then silently stood each spectator
  Their eyes were o'erflowing with tears;
Their lips—where the name of Creator,
  Had never been mentioned for years—
Were now breathing prayers full of pity
  To God, with an earnest desire
For those in a far-distant city,
  Deprived of a husband and sire.

The tale can be told by that letter,
  Denied all employment at home,
His wretched condition to better,
  Away o'er the land did he roam:
Repulsed by continued denials,
  He came to seek rest on this sod,
At last there's an end to his trials,
  He rests with a merciful God!

And "only a tramp" said the papers,
  When telling the news of the day,
Of how that poor man was discovered
  Just breathing his last by the way,
That was the brief epitaph written;
  But scarcely the letter was read
Till many Samaritans gathered,
  To tenderly care for the dead

IN THE JANUARY WAY-BILLS.

WITH the New Year number we will begin two new railroad serials, and after reading the first instalment you will not need a book of rules to tell that they have the right of way over a clear track. They are "The Flight of the Bald Eagle," by Jared L. Fuller, the closing chapters of whose novel, "The Jumping-Off Place," appear in this issue. The other serial is "The Engine That Struck It Rich," by Walter M. Bridges. It is a railroad narrative of real human interest, of people who do things.

Manufacturing steel rails is one of the greatest phases of the gigantic railroad industry. It makes a wonderfully interesting story, and, as told by E. L. Bacon in our January number, will both please and instruct you.

A day with a train-despatcher is a busy day, indeed. He is the expert chess-player of railway train-movement. J. Earl Clauson will describe his complex duties.

A railroad wreck is a distressing affair, any way you put it, but there have been some wrecks that produced such odd and unusual results that they make a startling story. If this particular article were not based on facts and written by Charles Frederick Carter, it would be classed as unbelievable.

"What effect has the diameter of a locomotive's drivers on its speed?" This question has been asked the eagle-eye of this magazine scores of times. Arthur Curran's article will tell you.

Wish we had space to mention the many good things with which we will make up the first train of our 1912 schedule. There will be many new cars, but we mustn't forget those well-liked, comfy Pullmans, "Told in the Roundhouse," "The Observations of a Country Station-Agent," and "Letters of an Old Railroad Man and His Son."

The list of short stories is particularly strong—a little stronger than usual. "Farley the Booze-Fighter," by Edward T. Glynn; "Some One to Love," by King Kelley; "The Gray Hour," by Walter T. Duncan; "Stacked Cards," by F. B. Lovett; "Telltale Finger-Tips," by Sumner Lucas; "Bill Edwards's Omelet," by F. H. Richardson, are among those on the January train orders. Take our word for it, they are the sort of fiction that has made this magazine famous as the only publication printing stories of real blood.

Right off the vines!

GREEN, tender, delicious—*these* are the peas we use for Campbell's Pea Soup. They cost us twice what we would have to pay for dried peas such as ordinarily used. But the flavor is worth the difference. The question of cost never enters into the quality of

Campbell's Soups

These peas come right from our own farms and are made into soup the same day—boiled, rubbed through fine colanders, and blended with rich milk and uncolored creamery butter.

Topped with a tablespoonful of whipped cream and served at one of your dinner affairs or dainty luncheons, this perfect soup is a delight both to the eye and the palate. It brings the flavor of springtime to your table in mid-winter if you choose.

You cannot realize the exceptional quality of Campbell's Soups until you try them. That is the only way.

When she [illegible] ngle and
[illegible]
An [illegible] the air
Th[illegible] y finds
health and joy
In Campbell's [illegible]

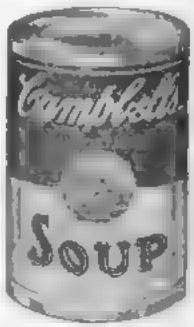
21 kinds 10c a can

Asparagus	Clam Chowder	Pea
Beef	Consommé	Pepper Pot
Bouillon	Julienne	Printanier
Celery	Mock Turtle	Tomato
Chicken	Mulligatawny	Tomato-Okra
Chicken-Gumbo (Okra)	Mutton Broth	Vegetable
Clam Bouillon	Ox Tail	Vermicelli-Tomato

Just add hot water, bring to a boil, and serve.

JOSEPH CAMPBELL COMPANY, Camden N J

Look for the red-and-white label



Who Are The Men ?

IT requires many kinds of men to build a railroad In the end you usually find at the head of the road men who had the most energy, pluck and ambition. The entire history of railroading proves this fact.

This history clearly shows that the man with a pick and shovel, the track walker, section boss, fireman, engineer, conductor, have an equal chance to succeed in the railroad business. It is not a matter of politics, or "pull," or influence, but simply a determination to do better all the time.

A few months ago we published the names of the Presidents of great railroads who had started in the lowest positions. We think this history worth repeating, and here it is:

Mr. Wm. C. Brown, President of the New York Central lines, began in the railway service in 1869, wooding engines, and was afterwards a section hand and telegraph operator

Mr H U. Madge President of the Rock Island system, began bucking water for a construction crew, and gave that up to become a telegraph operator.

Mr. B F Yoakum Chairman of Board, St Louis and San Francisco Railroad began as a peddler of fruit trees in Texas Mr. H M Hoxie, then prominent in the Nashville and Great Northern became interested in him and selected him to arrange the road's agricultural exhibit at the Nashville Exposition

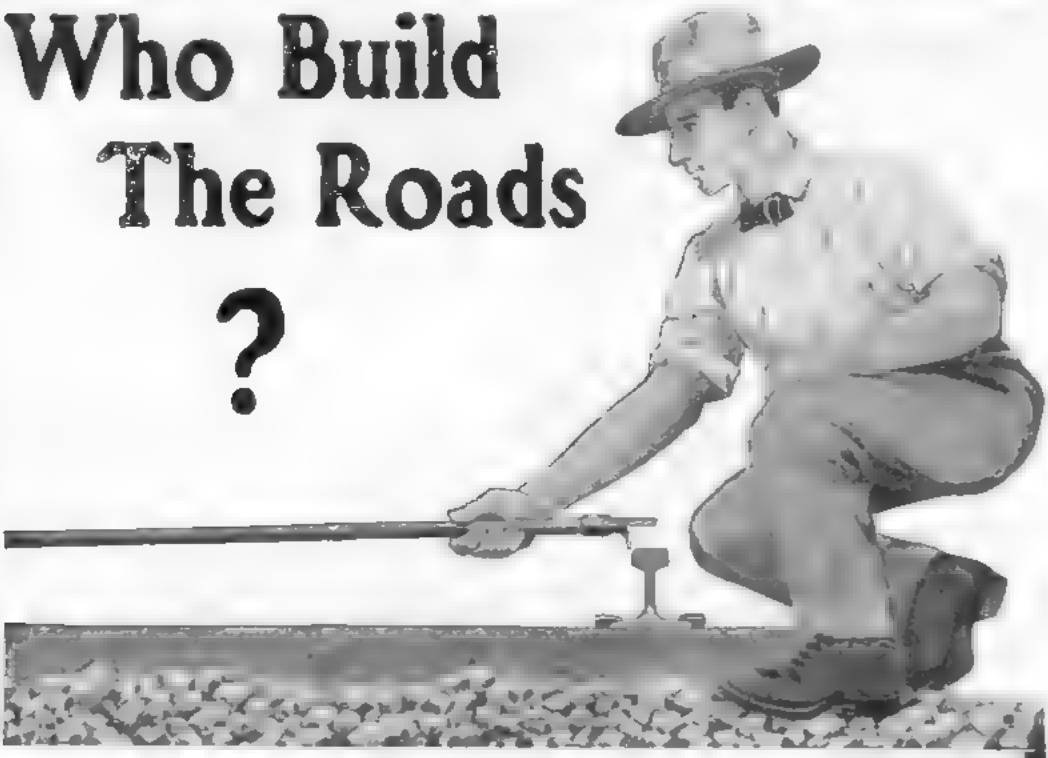
Mr C. M. Hays, President of the Grand Trunk System, had his first railway service as clerk in the Passenger Department of the Atlantic and Pacific Railroad in 1873

Mr. James J Hill, President of the Great Northern, was brought up on his father's farm He left it to find work in a steamboat office, and was also a clerk in a country store

Mr R S Lovett, President of the Harriman line began work with a grading crew, making track for the Houston East and West Texas, some thirty years ago.

RB

Who Build The Roads ?



RAILROADS, like every other commercial industry, are unable to find sufficient men of ability to fulfill their needs. They are growing timber to supply ties.

So are they training men to supply the demands of ever increasing operation. In order to do this, railroad companies controlling approximately one-third of the steam-railway mileage of the United States, and equipped with more than 16 000 engines, have made with the International Correspondence Schools, of Scranton, Pa., special arrangements for the training of their employes.

The I. C. S. plan has been so successful, that over 400 students voluntarily report each month an increase in salary as a direct result of I. C. S. instruction. Thousands of letters are on file, showing the success of this system.

It does not make any difference what road you are on, what part of the country you are in, the I. C. S. will give you thorough instruction by mail.

If you desire to go higher in the railway service, the I. C. S. will qualify you.

If for any reason you wish to seek an occupation outside of the railway service, the I. C. S. will help you.

With the I. C. S. it is simply a question of what YOU want to do. The first step is to mark and mail the attached coupon as directed. If you are not satisfied with the information you receive, you are under no obligation to proceed further.

MARK AND MAIL THE COUPON TODAY

INTERNATIONAL CORRESPONDENCE SCHOOLS
Box 861, Scranton, Pa.

Please explain, without further obligation on my part, how I can qualify for the position, or in the subject, before which I have marked X

General Foreman	Electrical Eng.
R. R. Shop Foreman	Machine Designer
R. R. Traveling Engineer	Electrician
R. R. Traveling Fireman	Mining Engineer
Locomotive Engineer	Mine Foreman
Air Brake Instructor	Foreman Machinist
Air Brake Inspector	Chemist
Air Brake Repairman	Assayer
Mechanical Engineer	Architect
Mechanical Draftsman	Bookkeeper
R. R. Construction Eng.	Stenographer
Surveyor	Advertising Man
Civil Engineer	Automobile Running
Banking	Concrete Construction

Name .....

Employed by ..... R. R.

Employed as .....

Street and No. .....

City ..... State .....

In answering this advertisement it is desirable that you mention RAILROAD MAN'S MAGAZINE

RC

Facts About Oliver Typewriter
LOCAL AGENCIES

For the benefit of hundreds who want to know the basis on which appointments to Local Agencies of The Oliver Typewriter are made and the money-making possibilities of such agencies, we submit these facts.

The Local Agents' sales organization of The Oliver Typewriter is made up of a force of 15,000 men. This sales force, great as it is, is constantly receiving additions because of the remarkable expansion of our business and the vast territory which must be covered. It is at the present time the strongest and most successful selling organization in the typewriter industry.

Believing, as we do, in the principle of intensive cultivation, we appoint Local Agents in the smallest towns and villages as well as in the great trade centers of the country.

This policy has built up an organization that is unique in many ways, but conspicuously so in the fact that its units are drawn from a multitude of different classes.

Instead of selecting only those who have had experience in selling various lines of merchandise we *waive* that qualification in favor of inherent *ability and willingness to learn*.

We assume the responsibility and expense of providing the necessary training in practical salesmanship in order to secure men of the right stamp.

We have found that men who are ambitious to *succeed*, men who are willing to *learn* and are possessed of *good hard sense*, make the best Local Agents.

One need not have a silver tongue to sell Oliver Typewriters—just know the machine, believe in it, *fight for it!*

Nothing can withstand such salesmanship, applied to such a product.

Did space permit we could cite many instances to show how telegraph operators, clergymen, bankers, mechanics, clerks, teachers, printers, lawyers and tradesmen have done wonders as Local Agents for The Oliver Typewriter.

Local Agents are not required to devote their entire time to the work. Men who are engaged in some other business or occupation can take on a Local Agency for The Oliver Typewriter without sacrificing their interests. This plan enables men now employed on salaries or engaged in business enterprise to materially *increase their incomes* without assuming the slightest risk.

The man who takes the Local Agency for The Oliver Typewriter has nothing to lose and everything to gain.

But look what we risk when we give a man the exclusive agency of The Oliver Typewriter in his locality.

We risk the *profits* which may be lost through the agent's neglect or inefficiency, for every town, however small, has definite sales possibilities.

We risk our prestige, for the Local Agent has our honor in his keeping.

The Local Agent makes on every sale of new Oliver Typewriters in the territory assigned, during the full life of the arrangement, even though our travelers may help him or make sales independently of him.

Because of the risks we assume in tying up exclusive territories with Local Agents, we exercise the greatest care in effort to "pick the winners."

How It Pays

The Local Agency for The Oliver Typewriter, considered purely from the standpoint of its *money-making possibilities* is exceedingly attractive. We set no limit to earnings. Where the field warrants a man in giving it his undivided attention, the agency can be made to pay a handsome income. The man who gives only *spare time* to the work can easily make it pay.

The young man in the small town or village who wants to get out in the great world, who seeks broader opportunities, is fortunate if he succeeds in securing a Local Agency for The Oliver Typewriter.

He becomes an integral part of a business of world-wide proportions.

Printype

OLIVER

Typewriter

The Standard Visible Writer

A business where ability commands a premium.

Men who started as Local Agents for The Oliver Typewriter are today officers of the company.

The Local Agent's work brings him in contact with one of the most progressive and successful sales organizations in the world.

Think of the inspiration, the enthusiasm, the incentive to *succeed* that come from this vital contact with a 15,000 man power sales organization!

The business man who takes up the Local Agency as an auxiliary to source of income can apply to the promotion of his own business the knowledge gained from this great force of sales experts.

Our famous "17 Cents-a-Day" Plan of selling Oliver Typewriters is a powerful aid to Local Agents.

With this splendid machine, our best product offered on such tempting terms, the Local Agent *must* succeed if he puts forth proper effort.

How to Secure a Local Agency

Applications should be forwarded by mail direct to Agency Department.

There are still a large number of towns where we have no Local Agent. There are other towns where The Oliver Typewriter is not represented satisfactorily. If there is no opening in your immediate locality, we will find a place for you elsewhere if you are the man we want.

You will readily understand the necessity for immediate action. Every mail brings a large number of applications, and Local Agency assignments are being made as fast as we find properly qualified men.

If you want to better yourself in 1912 *now is the time to act.*

Address Agency Department (141)

The Oliver Typewriter Company

343 Oliver Typewriter Building Chicago, Illinois

THE KEY

If You Are Off Key

From coffee drinking,

Quit

And try

POSTUM

The world pays well, those who are

"In Tune"

In the Business, the Household,
the Factory, the Profession.

"There's a Reason"

Postum Cereal Company, Limited,
Battle Creek, Mich., U. S. A.

Canadian Postum Cereal Co., Limited
Windsor, Ontario, Canada

In answering this advertisement it will be well to mention RAILROAD MAN'S MAGAZINE

RF

Look at this picture

It shows the actual size, and as far as a cut can, the quality of pictures taken by a camera which costs but $1.50.

No. 0 Premo Jr.

A substantial daylight loading film camera, suitable for a boy or girl, a man or woman of any age.

Easy to load and operate has automatic shutter, meniscus lens, double finders. A complete camera in every respect, it will please the one you want to please most for Christmas.

Catalogue of this and many other Premos free at the dealer's, or mailed on request.

Rochester Optical Division

Eastman Kodak Co. ROCHESTER, N. Y.

HYOMEI FOR CATARRH

Thousands of people who have breathed Hyomei through the little hard rubber inhaler know its soothing, healing action upon the sore, inflamed membrane of the nose and throat. But to get the best results from the use of Hyomei, the vapor treatment should be used in conjunction with the inhaler. Use it every night just before retiring:

Into a bowl of boiling water pour a teaspoonful of Hyomei; cover head and bowl with a towel, and breathe for five minutes the soothing, healing, antiseptic vapor that arises.

Hyomei (pronounce it High-o-me) does not contain one particle of opium, cocaine or other habit-forming drug. It is made of Australian Eucalyptus and some of the Listerian antiseptics. It penetrates the folds and crevices of the membrane and destroys the germs, soothes the sore catarrhal spots.

Money will be refunded if Hyomei doesn't give satisfaction in cases of catarrh, catarrhal deafness, coughs, colds and croup. Complete outfit, which includes inhaler, $1.00; extra bottle 50 cents, at pharmacists everywhere. Free trial bottles on request from

BOOTH'S HYOMEI CO.,
Box G, BUFFALO, N. Y

In answering any advertisement on this page it is desirable that you mention RAILROAD MAN'S MAGAZINE.

RP

When the Inspector says, "Get a New Watch"

IT'S either because you have a *poor* watch, or that *time requirements* have changed, or that you have *gone to a new road* with different requirements; but YOU HAVE TO FOOT THE BILL.

This is not so if you buy a "Studebaker," the great South Bend Railroad Model. For your dealer will give you a guarantee certificate with this watch that absolutely binds us to GIVE YOU A NEW WATCH FREE if there is any necessity for a new one due to changed requirements within five years of your purchase of a "Studebaker." This insures you against that expense.

"The Studebaker"

Railroad Model

"The South Bend" Watch

"THE STUDEBAKER" is invaluable where minutes mean miles, for it furnishes the correct time every minute of the schedule. It gives you the confidence and the satisfaction of knowing that you're *right*.

Engineer Elovs of "The Twentieth Century Limited" and other famous engineers carry "Studebakers."

Let us send you the book, "How Good Watches Are Made," and a sample copy of the SOUTH BEND WATCH INSURANCE CERTIFICATE that saves you money. Don't buy a watch until you have read this certificate.

THE SOUTH BEND WATCH CO.
Dept. 249-South Bend, Ind.

(85)

BURROWES BILLIARD AND POOL TABLE

EVERY father and mother wants to keep the boy at home nights, and would vastly rather have him bring his friends there to play Billiards and Pool than to meet them in the public poolroom, which often is merely the back room of a saloon.

Every young man wants to play Billiards and Pool,—wants to play well. The Burrowes Home Billiard and Pool Table is scientifically constructed and adapted to the most expert play. Many of the leading professionals and experts of the country, including some of the champions of world-wide reputation, keep in practice by using a Burrowes Table at home. Every shot, every angle is true and correct, hence to learn or practice on a Burrowes Table means to become proficient on a stationary table.

Burrowes Tables are made in sizes up to 4½x9 feet (standard), for rooms of different dimensions. They are easily set up, and quickly taken down and put out of the way. They may be set on dining-room or library table or mounted on their own legs or folding stand. All cues, balls, etc., free.

$1.00 DOWN

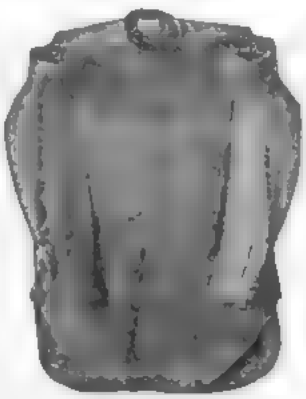
We issue a nicely illustrated catalog describing all the Tables and fully explaining our easy payment plan, by which you can secure any Table worth from $6 to $15 for $1 down and balance $2 per month. Larger Tables for $25, $35, $45, $55, $75, etc., on correspondingly easy terms

FREE TRIAL NO RED TAPE On receipt of first instalment we will ship Table. Play on it one week. If unsatisfactory return it, and on its receipt we will refund your deposit. Write today for catalog illustrating and describing the Tables, giving prices, terms of payment and all other information

THE E. T. BURROWES CO.
173 Spring Street
Portland, Me.

Cut Coat Style

Semi-Dress Signal Shirts Built for R. R. Men



They go on and off like your coat—no trouble at all when you're sweaty, hot and tired. Extra comfort features are provided not found in many high priced dress shirts—three inch overlap to flaps, button at bottom of breast plait, reinforced rip-proof band on sleeve slit, which is in the side—not in the seam.

Made in light or dark colors in a variety of neat patterns suitable for working or semi-dress. Two hand turned double band collars, or one soft attached if preferred. Price $1.00. ($1.25 if expressed West of Missouri River.) Finer fabrics at $1.50.

Union Made

SIGNAL SHIRT

Trade Mark

Try a Couple at Our Risk

Your dealer should have them, but if not, tell us his name and your size and we will send a couple by express C. O. D. If you like them pay express man. Otherwise return at our expense.

State whether you want the $1.00 or $1.50 grade or write for folder showing swatches of patterns and giving full particulars.

HILKER-WIECHERS MFG. CO.
1252 Mound Ave., Racine, Wis.
Makers of Signal Work Clothes—
A Special Factory for Overalls and Coats.

In answering any of these advertisements it is desirable that you mention the RAILROAD MAN'S MAGAZINE

RH

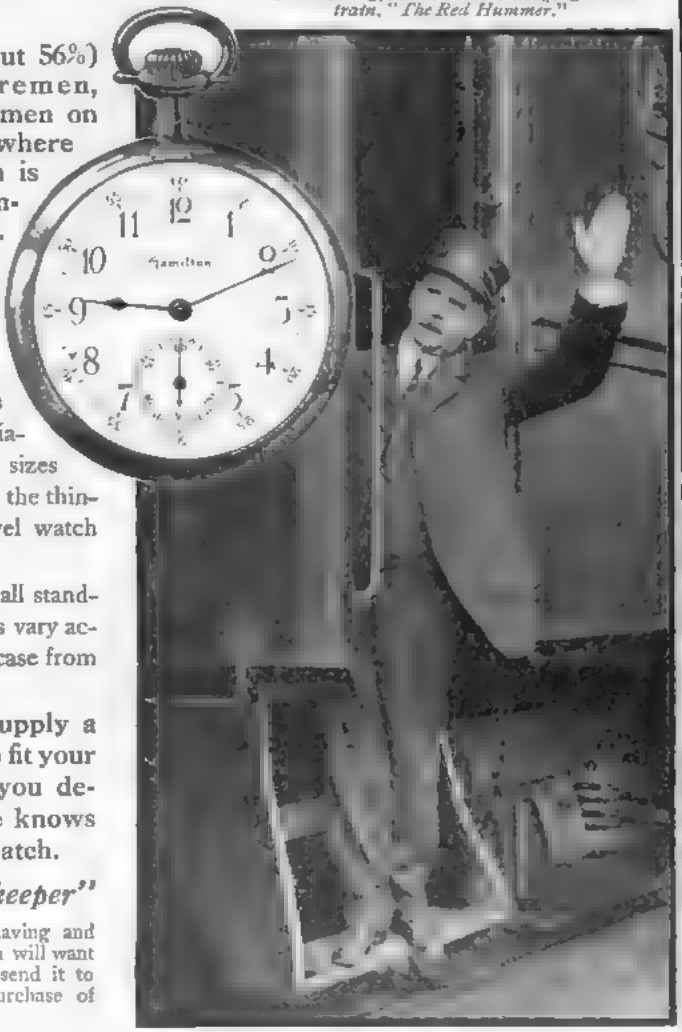
"I have been carrying a Hamilton for the past eight years,

and in twenty years I have found no watch that gives the satisfaction that the Hamilton Watch does." —*Conductor C. Smith, Chicago & Alton R. R.*

The Hamilton Watch

The Railroad Timekeeper of America

Conductor C. Smith of the Chicago & Alton train, "The Red Hummer."



Over one-half (about 56%) of the Engineers, Firemen, Conductors and Trainmen on American railroads where official time inspection is maintained carry Hamilton Timekeepers.

About four years ago the Hamilton 12-size, a fine, durable, thin-model, gentleman's watch was introduced. This watch is equal in accuracy and reliability to the larger railroad sizes in spite of the fact that it is the thinnest 12-size 19 or 23 jewel watch made in America.

Hamiltons are made in all standard sizes. Prices of watches vary according to movement and case from $38.50 to $125.00.

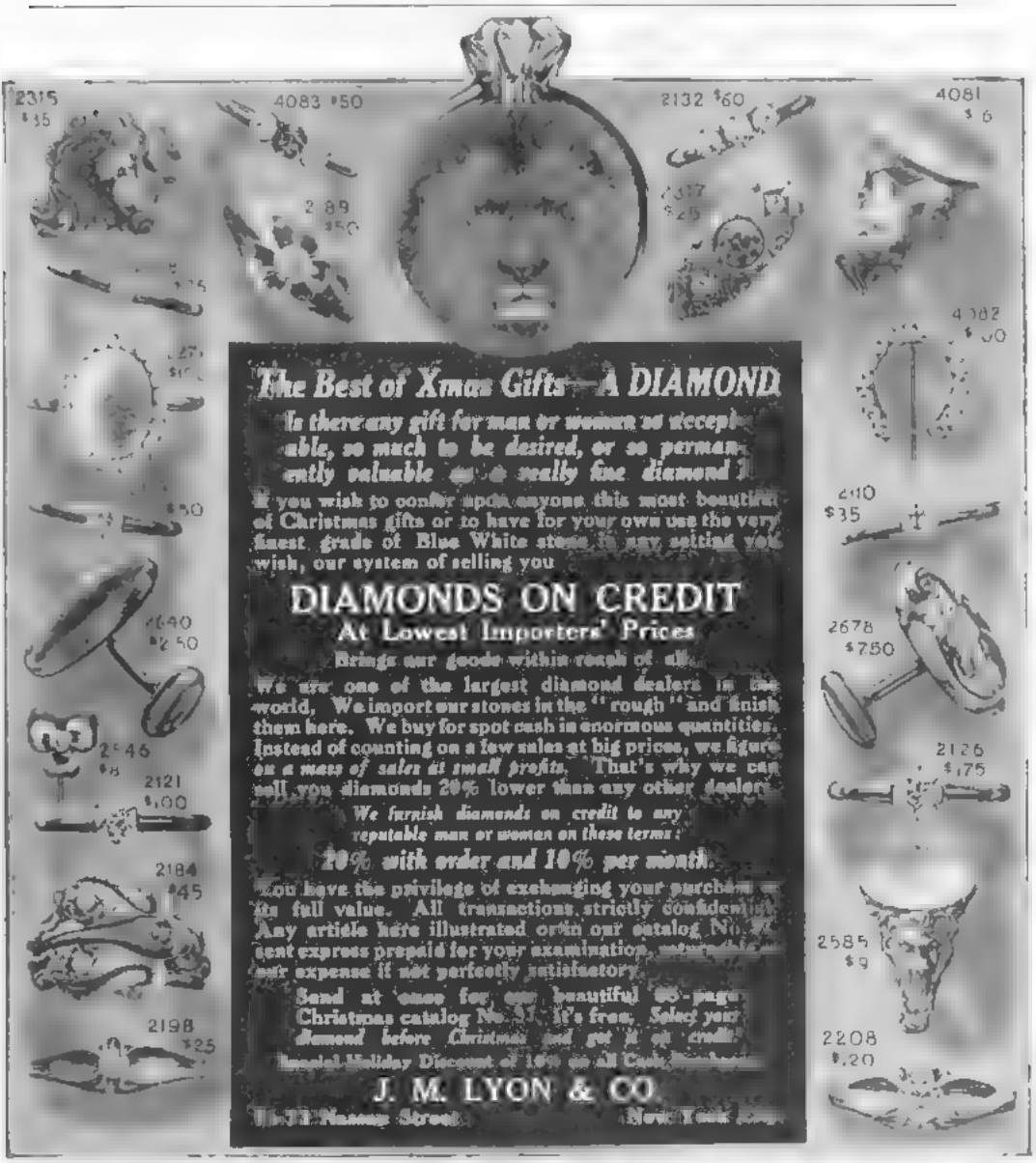
Your jeweler can supply a Hamilton movement to fit your present watch case if you desire. Ask him what he knows about the Hamilton Watch.

Write for "The Timekeeper"

This book is well worth having and saving against the day when you will want to buy a watch. We gladly send it to any one interested in the purchase of a watch.

HAMILTON WATCH CO., Dept. G, Lancaster, Pa.

In answering any this advertisement it is desirable that you mention RAILROAD MAN'S MAGAZINE


2315 $35
4083 $50
2132 $60
4081 $6
4382 $30
2640 $2.50
2121 $100
2184 $45
2198 $25
2678 $750
2126 $175
2585 $9
2208 $20
The Best of Xmas Gifts—A DIAMOND
Is there any gift for man or woman so acceptable, so much to be desired, or so permanently valuable as a really fine diamond?
If you wish to confer upon anyone this most beautiful of Christmas gifts or to have for your own use the very finest grade of Blue White stone in any setting you wish, our system of selling you
DIAMONDS ON CREDIT
At Lowest Importers' Prices
Brings our goods within reach of all.
We are one of the largest diamond dealers in the world. We import our stones in the "rough" and finish them here. We buy for spot cash in enormous quantities. Instead of counting on a few sales at big prices, we figure on a mass of sales at small profits. That's why we can sell you diamonds 20% lower than any other dealer.
We furnish diamonds on credit to any reputable man or woman on these terms:
20% with order and 10% per month.
You have the privilege of exchanging your purchase at its full value. All transactions strictly confidential. Any article here illustrated or in our catalog No. 51 sent express prepaid for your examination, at our expense if not perfectly satisfactory.
Send at once for our beautiful 60-page Christmas catalog No. 51. It's free. Select your diamond before Christmas and get it on credit.
Special Holiday Discount of 10% on All Cash
J. M. LYON & CO.
71-73 Nassau Street, New York

Learn a Paying Profession

PHOTOGRAPHY

Photo-Engraving and Three-Color Work

Our graduates earn $20 to $50 a week. We assist them to secure these positions.

ILLINOIS COLLEGE OF PHOTOGRAPHY
284 Wabash Avenue, Effingham, Illinois

$1.00

STOP FRETTING
OVER YOUR XMAS PRESENTS

"LENOX" Combination Xmas Box

Sent to any address prepaid and insured for ONE DOLLAR

Contents of Box Designed for MEN:

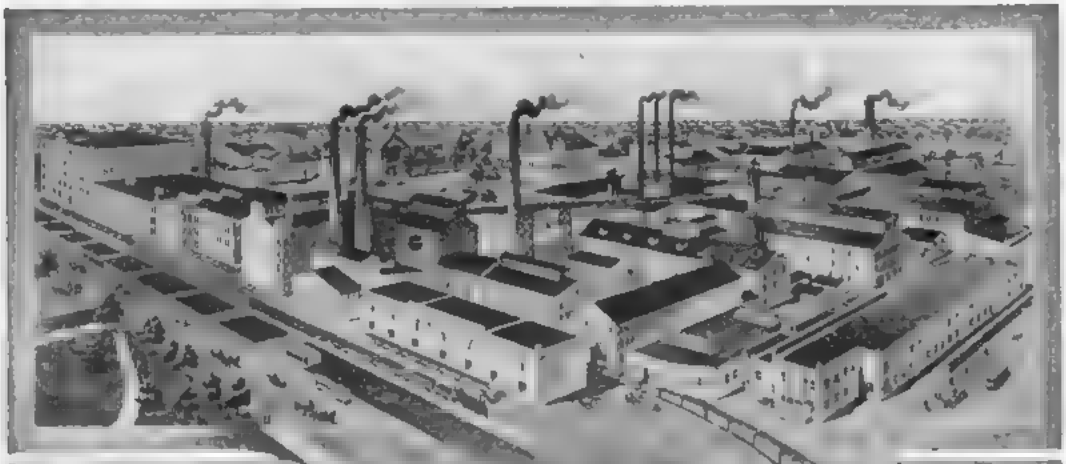
ALL FOR ONE DOLLAR

Contents of Box Designed for WOMEN:

ALL FOR ONE DOLLAR

LENOX SILK WORKS, Dept 29, 5 W. 31st St., New York

We need good Agents



Many Carloads Daily

Of

Post Toasties

Leave the Pure Food Factories of the Postum Cereal Co., Ltd.

They go to various parts of the world and supply crisp bits of corn, delicately browned, for breakfast.

Many families have become accustomed to the ease of service — no cooking being required.

It is difficult to conceive of a more palatable and winning delicacy, particularly when served with cream and sugar.

"The Memory Lingers"

Postum Cereal Company, Limited
Battle Creek, Mich., U. S. A.

Canadian Postum Cereal Co., Ltd.
Windsor, Ontario, Canada

RK

E. Phillips Oppenheim's NEW NOVEL Starts in THE CAVALIER For December

Place an order with your newsdealer at once if you want to read Oppenheim's latest and most powerful story

Mr. Marx's Secret

"Mr. Marx's Secret" is Oppenheim at his best. It is a mystery tale of absorbing interest, with all the charm and feeling of "The Malefactor," with the rich sentiment of "The Missioner" and the realism of "The Conspirators."

Be sure to read the opening chapters.

NOTE—The demand for THE CAVALIER for December will be very large. Leave your order now with your nearest newsdealer, or send 10 cents direct to the publishers,

THE FRANK A. MUNSEY COMPANY, 175 FIFTH AVE., NEW YORK

DIAMONDS WATCHES ON CREDIT

For Christmas Presents—Make Your Selections Now

Write for Our Handsome Christmas Catalog filled with beautiful photographic illustrations of Diamonds, Watches, Solid Gold Jewelry, Silverware and Novelties for Christmas presents. Select any article you would like to own or present to a loved one; it will be sent on approval to your home, place of business or express office, without obligation whatever on your part. If entirely satisfactory in every way, pay one-fifth down and keep it, balance in eight equal month payments. If not satisfactory, return it. We pay all charges and take all risks. Every honest person's credit is good with us. **Diamonds** increase in value 10 to 15 per cent. each year. A Diamond is the best gift for a loved one; it lasts forever, and every day reminds the wearer of your regard and good judgment. **Our prices** are 10 to 15 per cent. lower than those of the ordinary cash retail jeweler, and our terms are easiest.

No. 256 — Handsomely Carved Fine Diamond Ring, 14k solid gold, **$45**
Terms: $4.50 a Month

No. 278 — Ladies' Diamond Ring. Loftis Perfection mounting. 14k solid gold
Terms $4 a Month

THIS ELGIN WATCH, 17 JEWELS, ADJUSTED,

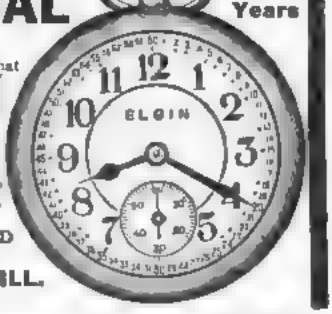
Men's 16 Size (also Ladies' 0 Size), Thin Model, New Marginal Minute Dial, In Gold Filled Case, Guaranteed for 25 Years. Plain Polished or Handsomely Engraved, Sent Prepaid on

No. 364 Guaranteed 25 Years

30 DAYS' FREE TRIAL

THEN $2.50 A MONTH

Our cut price of **$25.50** for this magnificent Elgin Watch, that will pass as a fine inspector, is the greatest bargain ever heard of. **NO MONEY DOWN $2.50 a Month** after examination by you. Write us you are a railroad man or not, state the watch you want. No matter where you live, we will trust you. SEND FOR CREDIT BLANK TODAY. We give lowest cash and easiest terms than any house in America.



An Account With Us is a confident promise. Our patrons use their charge accounts with us year after year, finding them a great convenience at such times as Christmas, New Years, engagements, weddings, anniversaries, etc.

We Are the Oldest, largest and most reliable Diamond and Watch credit house in the world. Established 1858.

Write for a copy of the "Loftis Blue Book," telling all about "How Easily You Can Wear and Own a Diamond or Watch." It is free. WRITE TODAY.

LOFTIS BROS & CO. EST'D 1858

The OLD RELIABLE, ORIGINAL DIAMOND AND WATCH CREDIT HOUSE
Dept. G 849, 100 to 108 N. State St., CHICAGO, ILL.
Branch Stores: Pittsburgh, Pa., and St. Louis, Mo.

Are You Satisfied With Your Income?

Would $500.00 a year or more, on the side, be an object to you?

You can easily make that, and more too, if you have a back yard, or a little land and are willing to devote two hours a day to the work. The poultry business cannot be overdone. There are 91,000,000 people in the United States, and there will be more next year, and those people must be fed. The growth is in the cities. **Consumers are increasing twice as fast as producers.** High prices have come to stay. Start a business of your own and get your share of the billion dollars a year that is spent for poultry and eggs.

"SIDE-LINE POULTRY KEEPING."

$1,188.05 is the amount cleared by F. H. Dunlap, of West Salisbury, N. H., in 1910, from his hens. Mr. Dunlap is a country merchant and postmaster, and does not have over two hours a day on an average to devote to his hens. The full story of his success, his methods of feeding, marketing, etc., are described in the book, "Side-Line Poultry Keeping."

$1,009.31 R. A. Richardson, of Haverhill, Mass., a shoe cutter, made his hens pay him $1,009.31 in 1910, and kept working at the bench at the same time. How he did it is told in "Side-Line Poultry Keeping."

"SIDE-LINE POULTRY KEEPING"

is the name of a new book by Edgar Warren, the popular and reliable writer upon poultry topics. It is written for the man or woman who wants to add to their income in spare time, but will not interfere with their present occupation. It is so plainly written that the person who never kept a hen by following the instructions of the book can make a success from the start. Tells what breeds pay and what do not. Discusses pigeon raising, fruit growing, berries and garden sang in connection with poultry. Describes two simple, practical poultry houses which can be built at low cost and sold when the owner gets through with them. Tells how to hatch and brood chicks both naturally and artificially, and describes a wonderful brooder system that can be installed at low cost. Do you know how to pick out the layers? Can you tell with your eyes shut which hens are laying and which are not? Side Line Poultry Keeping will show you. It will tell you what to feed for eggs, how to get fertile eggs, how to grow green food in winter, how to make lice powder that will kill the lice as soon as it touches them, what to do in case of sickness, etc., etc. Shows you how you can get the top-notch prices for what you have to sell. Has a chapter on "Laying Down Eggs," which gives the two methods which are absolutely safe and reliable, by which eggs laid down in March and April are sold in November and December, and make 100 per cent profit. Drawings and description of a trap-nest with which to keep individual records. Gives Mr. Dunlap's cure for White Diarrhoea. Tells how to send dressed fowls to market with empty crops without shrinkage in weight. These are but a few of the good things in the book.

SPECIAL OFFER

Only $1.00 96-page book and the leading Poultry Paper for two years.

Invaluable to every man who wishes to make money on the side, and indispensable to the man who is looking forward to the free independent healthful life of the poultry farm. Ninety-six pages, illustrated. **Price 50 cents,** or with the American Poultry Advocate one year, 75 cents; two years' subscription and book for $1.00, or given as a premium for two yearly subscriptions at 50 cents each. Our paper is handsomely illustrated, 44 to 120 pages, 50 cents per year, 3 months trial, 10 cents. **SAMPLE FREE.** Catalogue of poultry books free.

AMERICAN POULTRY ADVOCATE 152 Hodgkins Building **SYRACUSE, N. Y.**

RM

Racine SHIRTS

With collars attached.

For Men Who Work Or Play In The Open.

CUT to fit, from serviceable, wear resisting Flannels, Twills and Chambrays in a variety of patterns and colorings. Either high fold or low fold soft collars attached. Breast pockets, double lapped and stitched seams and perfect buttons, sewed on to stay. If you want comfortable, neat, long wearing soft shirts, insist upon getting the "*Racine*". Prices the same as for ordinary soft shirts.

Sold where good shirts are sold.

The Chas. Alshuler Mfg. Co.
Makers
1203—14th St. Racine, Wis.

You save over 50% on the Cost of your Boat if you use our "Easy to Build" System

We do all of the hard work by machinery. Your part is **easy** and **simple.**

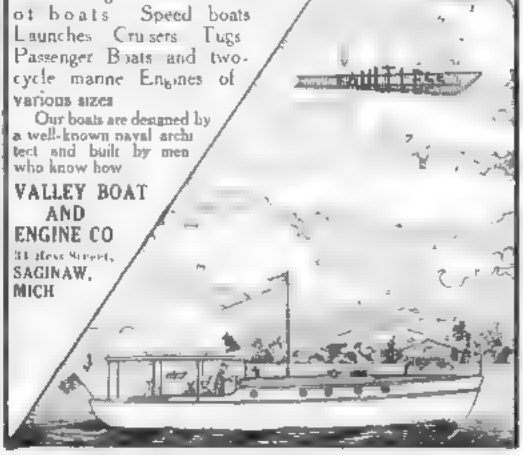
Our complete illustrated bulletin on "Boat Building Made Easy" tells you all about it explains **everything** in **simple** language

Now is the time to start your boat to have it ready for the water early next Spring. We'll send you this valuable bulletin upon request if you are interested

We design and build all kinds of boats Speed boats Launches Cruisers Tugs Passenger Boats and two-cycle marine Engines of various sizes

Our boats are designed by a well-known naval architect and built by men who know how

VALLEY BOAT AND ENGINE CO
31 Hess Street,
SAGINAW, MICH



He's got a Job that's good

We conduct a practical school in addition to the home course. Valuable model free to every student Write today

BUFFALO AUTOMOBILE SCHOOL
404 Edward Building, Buffalo, N. Y.

This World Renowned, 17 Jewel, 20 Year Guaranteed Gold-filled Waltham or Elgin Watch, Only $16.00.

This means to you the best possible watch at the best possible price. It's our revolutionizing, profit-sharing price and you can pay for it our easy way—a little down a little each month. Your credit is good with us. You can have your choice of either the famous Waltham or the famous Elgin, known the world over as the best watches made. Each watch bears the name Elgin or Waltham. This is without doubt the greatest watch offer ever made. No one need be without a dependable watch. You take no risk whatever when you buy of us, because we send you the watch you select on approval. Examine it carefully. If not perfectly satisfactory in every respect, you may return it to us.

ELGIN OR WALTHAM WATCH ON CREDIT

SPECIAL OFFER

$16.00 SEND NO MONEY $2.00 MONTHLY $2.00 ON APPROVAL

We are the largest direct, easy payment watch house in the world—the most competent watch experts. We offer you only such watches as good enough for us to give our written guarantee and the guarantee of the maker stamped on the case. Such watches as the Elgin and Waltham everyone knows must be right and must be the best. You need no longer be without a dependable, guaranteed watch, one which we trust you practically a lifetime. You can buy on your own terms, on easy credit payments. Write today for our beautifully illustrated

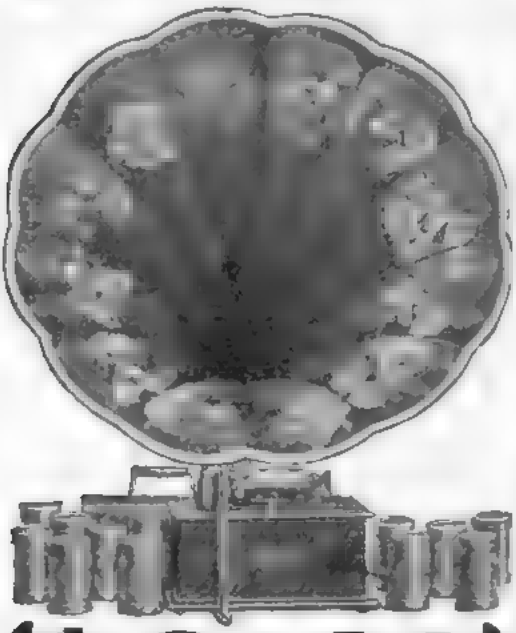
FREE CATALOG

the latest designs and characters of watches explaining our easy payment credit plan. Send name and address or just your color. It's free.

THE AMERICAN WATCH COMPANY of ST. LOUIS
Department 104 St. Louis, Mo.

In answering any advertisement on this page it is desirable that you mention RAILROAD MAN'S MAGAZINE.

RN



$2.40

Takes the Superb New Model Edison

Give the new model Edison a thorough trial in your own home free—then, if you decide to keep it, send us $2.40. **The greatest phonograph offer ever made.** And, just think—it is on the new model Edison—the instrument which Mr. Edison has just perfected after years of unique research and experiment.

Free Trial Yes, you may have a free trial of this greatest of all phonographs in your own home. A genuine free trial. Take your pick of any of these gems of wonderful instruments and from thousands of records I will send them to you free. No deposit. No C. O. D. payment to be whatsoever. Give your family, your friends and your neighbors all the entertainment of fine grand opera, vaudeville, minstrel, military, symphony, brass bands, world famous bands, world famous bands, dance records, etc. All the world's great artists at your command. Write for the Edison Book of Music and we will send it free. FREE. Even if you wish, we will put on the records in your home and we pay the freight.

If you decide to keep the phonograph send us $2.40 and then the balance in the easiest kind of payments. Terms as low as $2.00 a month, without interest. And, remember if you want it at once, you may obtain the rock-bottom price.

Send No Money—Send the Free Coupon

Do not send us a penny. Before you send us a cent we want you to have the opportunity to see the new model Edison. We want you to hear it. We want you to compare it with any other phonograph. We want you to make any and every test you desire. Then if you decide to keep the phonograph send us $2.40 and the balance in easy payments. Write now for the greatest phonograph offer ever made.

F. K. BABSON
Dept. 1109 Edison Block, Chicago, Ill.
Western Office: 65 Post St., San Francisco, Cal.
Canadian Office: 355 Portage Ave., Winnipeg, Man.

FREE
Catalog Coupon

F. K. BABSON
Dept. 1109 Edison Block, Chicago, Illinois.

Please send your new Edison Catalog and full particulars of the $2.40 offer made here.

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Address _____

Select Your Christmas Gifts from this Marshall Book

CHRISTMAS buying is made easy by this Free 1912 book. Write for it at once. There are more than five thousand articles to choose from, ranging from the simplest gold, silver and platinum jewelry to the most costly diamonds and other precious stones. Thousands of people of the most critical taste have been buying from the Marshall Book by mail for years. And so can you, no matter where you live, select from this Book gifts that will please most.

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The famous Marshall "F" grade diamonds cannot be equalled by any retail jeweler at any price. They have got a national reputation for us. Geo. E. Marshall, Inc., for these goods, honest prices and square dealing. Our 1912 Book is free. Every article is guaranteed. If you want goods sent prepaid on approval, we will send them. If you are completely satisfied after careful examination. Then you can choose an

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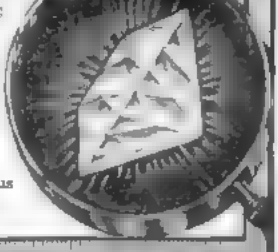
GEO. E. MARSHALL

31 N. State Street
Suite 463, Columbus Memorial Building
CHICAGO



EVERYTHING GENUINE AT MARSHALL'S

WIN THIS $1200

Thousands Already Won—Going on Daily

TEN PEOPLE GET $40,000.00

They Tell You How to Win.

LISTEN! Stoneman, Nebr. [illegible] recently received $1200 one month, $1 [illegible] 15 minutes, $800 in 11 days; K. [illegible] Mond, [illegible] of $2212 in 2 weeks, Bergquist, Y. [illegible]graph [illegible]er, $100 daily, Best a fairy tale, fake or humbug, but proven absolutely true by sworn statements. Government patronage, [illegible] pages under [illegible] and limit [illegible] references. Costs nothing to Investigate. [illegible] gamble money making contest no longer [illegible] trolled by a few; now open to any honest, [illegible] man or woman. Big [illegible] by mechanics, workers, farmers, teachers, doctors, lawyers [illegible] from all walks of life. Experience, capital, [illegible] unnecessary. You can own, [illegible] erate and control same private enterprise that brought Wilson (banker) $5,000 in 30 days; Reed [illegible] $1685 in 75 days; [illegible] $1000; [illegible] (grocer) $2800; [illegible] $4000; Beard (doctor) $2800; Hart (farmer) $5400; Nicholson (minister) $195 first 12 hours. Hundreds similar [illegible] prosperity—banking money, [illegible] checks, notes, [illegible]. Don't wonder. Same appointment plan same money for you. [illegible] Knowing the reason dispels all doubt. Wonderful, but true.

M. Stoneman

STRANGE INVENTION

Strange Invention gives every home a bath room for only $6.50! [illegible] A complete bath room, [illegible] tub, wash basin, [illegible] Folds up into a bath [illegible] with hot or cold running water, [illegible] No [illegible] water [illegible] [illegible] connections. Can be [illegible] no plumbing, no water works; self heating, [illegible] cheap. No friction, [illegible] scratch or rust. Simple child can operate. Truly marvelous. A [illegible] bathing with air drying, [illegible] of hugging water, filling tubs, emptying, [illegible] putting away. Could anything be more [illegible] Thousands of millions [illegible] to get. Already [illegible] packed. "There, there, that's what I've been looking for!" Little wonder Watson sold 102 in 14 days; Hart 18 in 3 hours. This is what we need. [illegible] all to make a fortune. Don't [illegible] get the first Auto chance [illegible] exclusive sale. [illegible] or more. Money [illegible] Credit given active distributors. Send no money. Investigate first. Send today for remarkable offer. It's valuable and free.

"SEE IT ENERGIZE"

ALLEN MFG CO., 3394 Allen Bldg., TOLEDO, OHIO

"DON'T SHOUT"

"I hear you. I can hear now as well as anybody. 'How?' Oh, some thing new—THE MORLEY PHONE. I've a pair in my ears now, but they are invisible. I would not know I had them in, myself, only that I hear all right."

The **Morley Phone** for the

DEAF

makes low sounds and whispers plainly heard. Invisible, comfortable, weightless and harmless. Anyone can adjust it. Over one hundred thousand sold. Write for booklet and testimonials.

THE MORLEY CO., Dept. 768, Perry Bldg., Phila.

Traveling Salesmen
and Saleswomen Wanted

Earn While You Learn. We now have on file letters from thousands of [illegible] and Manufacturing firms who are anxious to employ [illegible] and salesmen capable of earning from $[illegible] to $[illegible] a year and expenses. No former experience [illegible] training [illegible]. We will teach you to [illegible] and [illegible] you [illegible] Free Employment Bureau [illegible] assist you to secure a [illegible] will earn a higher [illegible] position [illegible] you are learning [illegible] Write today for full particulars. [illegible] 64 page [illegible] and [illegible] from over a thousand persons we have recently placed in good [illegible].

Address, Nearest Office, Dept. 102

National Salesmen's Training Association

Chicago New York Kansas City New Orleans Seattle U. S. A.

BARODA DIAMONDS

Flash Like Genuine

ANY STYLE — DIAMONDS

at 1/40 the cost—IN SOLID GOLD RINGS

Stand acid test and expert examination. We guarantee them. **See them first then pay. Special Offer**—14k Tiffany ring [illegible] containing [illegible] $9.98. [illegible] $[illegible] Send [illegible] for inspection. **Catalog FREE.** [illegible] for one. [illegible] The Baroda Co., Dept. A 12 Leland & Dover Sts. Chicago.

MOUNT BIRDS

Taxidermy Book FREE

We teach you by mail to stuff and mount all kinds of Birds, Animals, Game Heads. Also to tan skins and make rugs. Be your own taxidermist. Decorate your home with your beautiful trophies or increase your income selling specimens and mounting for others. Easily, quickly learned in spare time by men and women. Highest endorsements by thousands of students. Write today for our great free book "How to Mount Birds and Animals." Free

—write today. N. W. SCHOOL OF TAXIDERMY, 1108 E. WOOD ST., BOX 0, OMAHA, NEB.

AGENTS—$45.00 A WEEK
MENDETS

Mend all leaks instantly on [illegible] pots, [illegible] pipes, [illegible] utensils, etc. No heat, solder, cement or rivet. Any one can use them. Fit any surface. Smooth. Sample box, 10c. Complete box, assorted sizes, 25c, postpaid. Wonderful opportunity for live agents. Write [illegible]

Collette Mfg. Co., Box 202, Amsterdam, N. Y.

706D MASONIC TEMPLE, CHICAGO, ILL.

I TEACH Penmanship BY MAIL

[illegible] Write [illegible] booklet.

C. W. BARNES, 7240 Main Building, Kansas City, Mo.

WHITE VALLEY GEMS

IMPORTED from FRANCE

SEE THEM BEFORE PAYING!

These gems are chemical white sapphires—LOOK like **Diamonds.** Stand acid and fire diamond tests. So hard they easily scratch a file and **will cut glass.** Brilliancy guaranteed 25 years. All mounted in 14K solid gold diamond mountings. Will send you any style ring, pin or stud for examination—No charges prepaid—**no money in advance.**

Write today for Free Illustrated booklet, special prices and ring measure.

WHITE VALLEY GEM CO., N 704 Saks Bldg., Indianapolis, Ind.

A STRAIGHT NOSE

Is attractive, aids socially and in business. If you knew that a hump or dent in your nose or a hollow in the cheeks, throat or neck could be removed without cutting, scarring or detention indoors, would you have it removed? Consult

DR. E. P. ROBINSON

Suite F, 116 West 39th Street [illegible] New York

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$97 50 PER CARAT

GENUINE PERFECT CUT LEGALLY GUARANTEED DIAMONDS

$97 50 PER CARAT

World's Lowest Price

from Importer direct to you. Profits of many middlemen saved.

Below prices $37.50 each at $50.00, each at $75.00, each at $97.50 per carat, $40.00 per carat, $50.00 per carat. Select from our assortment at approximated **gift** for Christmas, engagement, birthday wedding. **A size for any price.**

The Basch Plan of selling is approved by mail regardless of payment until **after** you have seen the diamond and are perfectly satisfied with our values. We pay all expenses. Any diamond sent for your examination without obligation. Carat weight and price separate from gold mounting always stated and guaranteed.

Our Legal Money Back Guarantee is a written contract to **refund 90 in cash** any time within one year for any reason. As to the **full purchase price** on any diamond, plus interest, based on the carat weight, quality and value of every diamond. You will be delighted with the safety, service and satisfaction.

No Delays! Immediate attention to mail requests for a diamond or for our Diamond Book (Free). **Send no money. Write today!**

The New Basch Diamond Book Free Contains five colored reproductions of a painting by Spreitzer, worth framing. Your choice of thousands of rare pins, brooches, etc. You cannot buy a diamond safely or intelligently without it. Copy ready to mail immediately on receipt of postcard or letter and address.

D5500 [illegible] complete $102.50
D6503—[illegible] complete $ 00.00

L. BASCH & CO., Diamond Importers, Dept. D 343 S State St., Chicago, Ill.

BASCH

Sharpen Your Own Safety Razor Blades

A [illegible] with an Ideal Holder. Save money, save time. Price $1 with fine horsehide strop. [illegible] makes your razor [illegible] Regular [illegible] cuts [illegible] for [illegible]

IDEAL HOLDER CO., 381 Fifth Ave., New York
Dept. H, our Factory, Canton, Ohio, Box 27

SCOTCH CALABASH PIPES

Price 50c each or 3 for $1, postpaid.

Why foul yourself by smoking a strong pipe? You can get a Scotch Calabash that absorbs all nicotine and poisons and ensures a cool, sweet smoke. Money back if you are not satisfied.

THE ROYAL PIPE CO.
216 Broad Street Nashville, Tenn.

Stamps Taken

VENTRILOQUISM

ALMOST ANYONE CAN LEARN IT AT HOME

This is no special gift as you have supposed, but an art. I have taught thousands in all parts of the world. Cost small. Send to-day 2 cent stamp for particulars and proofs.

O. A. SMITH, Room 1678 823 Bigelow St., PEORIA, ILL.

PATENT YOUR IDEAS

$8,500 offered for one invention. [illegible] How to Obtain a Patent and "What to Invent" sent free. Send for our free report as to patentability. Patents advertised for sale at our expense in Manufacturers Journals.

Patent Obtained or Fee Returned
CHANDLEE & CHANDLEE, Patent Att'ys
Established Years
1040 F. Street, Washington, D. C.

Remoh Gems

Not Imitations

A marvelously reconstructed gem—the greatest triumph of the electric furnace. ***Looks*** like a ***diamond***—***wears*** like a ***diamond***—***will cut glass***—stands filing, fire and acid tests like a diamond—guaranteed to contain no glass. Remoh Gems have no paste, foil or artificial backing—their brilliancy is guaranteed forever. One thirtieth the cost of a diamond. These remarkable gems are set only in 14 Karat Solid Gold Mountings. Sent on approval—your money cheerfully refunded if not perfectly satisfactory. It will be well worth your while to get our De-Luxe Jewel Book—yours for the asking. Cut out and mail the coupon below—or write a postal. Address

Remoh Jewelry Co.,
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Remoh Jewelry Co.,
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Send your De-Luxe Jewel Book.

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Address .....
City .....
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Sign And Mail This Coupon Today

IGNORANCE of the laws of self and sex will not excuse infraction of Nature's decree. The knowledge vital to

A Happy Marriage

has been collected from the experience of the ages, in

Sexology

Illustrated

By William H. Walling, A. M., M. D

It contains in one volume

Knowledge a Young Man Should Have
Knowledge a Young Husband Should Have
Knowledge a Father Should Have
Knowledge a Father Should Impart to His Son
Medical Knowledge a Husband Should Have
Knowledge a Young Woman Should Have
Knowledge a Young Wife Should Have
Knowledge a Mother Should Have
Knowledge a Mother Should Impart to Her Daughter
Medical Knowledge a Wife Should Have

and [illegible] libraries of the heads of our government and [illegible] eminent physicians, progressive professors and [illegible] of the country

All in one volume, illustrated, $2, postpaid.

Write for "Other People's Opinions" and Table of Contents

Puritan Pub. Co., 762 Perry Bldg., Phila., Pa.

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Young Men Wanted

For AUTO Drivers AND Repairmen

Big demand for trained men everywhere
A new field—and constantly growing larger
Pleasant work out-of-doors and big pay

You Can Be An Auto Expert

We teach you the entire subject by mail in 10 weeks. Simple, practical, and interesting home study course. Anyone can learn now. No previous experience necessary—we furnish free outfit. Besides, we assist you to secure a good position.

SEND FOR FREE LESSON TO-DAY

Don't miss this offer. Write us at once before you forget

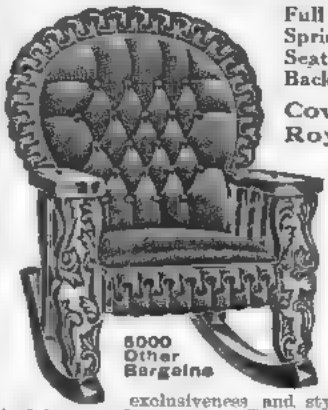
The Original Auto School

Empire Auto Institute
754 Empire Bldg.
Rochester, N. Y.

Owners—We supply competent men

EARN $25.00 TO $50.00 Weekly

ROYAL LEATHER ROCKER



Full Spring Seat and Back **$3.85**

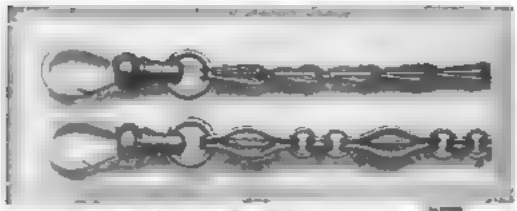
Covered in Best Royal Leather

Look at the picture; doesn't this Rocker look inviting with its high broad, shapely back and deep roomy spring seat? It's made to last forever, and its wide arms supported by six neat turned spindles, and massive front carved posts, give it the exclusiveness and style that cannot be had in any other rocker. Frame is roughly seasoned oak high grade and gloss finish. Best quality Black Royal Leather, workmanship first-class. Price but $3.85 makes it the biggest bargain ever offered. We can afford such values because we own our own lumber lands, saw mills, factories and salesrooms. Money back if it is not worth double. Send for our large FREE cash catalogue of Furniture, Rugs, Curtains, etc. Learn at once how much cheaper and better you can buy for cash direct from the manufacturers. We save you all extra profits. Write NOW; better still, enclose $3.85 for this comfortable rocker. Order by number 670. Address:

BIG CATALOG FREE

(11)

Lincoln-Leonard & Co., 1296 W. 37th St., Chicago



Latest Designs in Vest Chains

Pay for Style and Workmanship

Write for Style Book-FREE

SIMMONS

B. F. SIMMONS CO., 199 N. Main St., Attleboro, Mass.

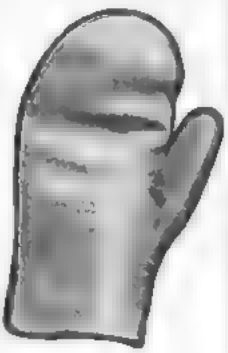
SIMMONS CHAINS and FOBS

The Little Friend of the Deaf

Actual Size

This ad is to deaf people who have about given up—who are failing in hope and in courage—people who think their cases unlike other cases which have been cured. We don't want any money. Just send for a book that tells about "Wireless Telephones for the Ears"—little devices that 30,000 deaf people are using today because they HEAR with them. Think of it, men and women; these tiny wonders are so small that they fit in the ear *out of sight* and so *well* that you never feel them even when lying down. *Let you hear whispers!* Is your case beyond such simplicity? Not a bit of it. One of the officers of this company is a deaf man. He became desperate, and in desperation developed this marvelous ear drum. It is one of the inventions of Mother Necessity, *not inspiration.* Talk to him today. You'd never even suspect his affliction. He's been improving this tiny "phone" for 20 years. There is nothing else to compare with it—anywhere. Don't you want the book he has written about it—a book by a man who understands deaf people because he is one of them? You do, if you want to get back your hearing. Just say, "Send the book," on a post card, and mail it to **WILSON EAR DRUM CO.**, 271 Todd Bldg., Louisville, Ky. (17)

Strong as Raw-Hide Soft as Kid



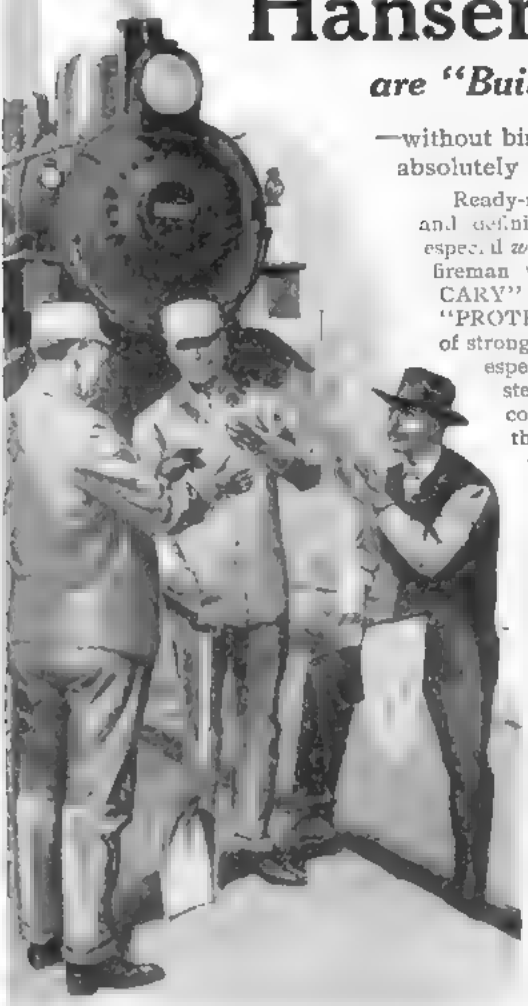
THAT'S because Hansen's Gloves are the result of twenty-five years' experience in tanning leather. Also because they are made of the choicest selection of leathers, *guaranteed* not to shrivel, shrink, harden, crack or peel. They are soft, pliable, and combine utmost comfort with service. When soiled, or greasy, wash them in gasoline and they are like new.

Hansen's Gloves

are "Built Like a Hand"

—without binding seams or rivets that scratch, and absolutely free from clumsiness or extra bulk.

Ready-made, though "made-to-order;" a specific and definite *fit*—not only for your *hand*, but for the especial *work* your hand must do. The engineer and fireman will appreciate the protection in the "PECCARY" gauntlet, of the strongest pigskin, or the "PROTECTOR" or "GLAD HAND" of strong horsehide, designed to give especial service against heat and steam, with flexibility and comfort. For Switchmen, there is the special "SLIP-OFF" mitten. All are low in price, for they cost no more, and outlast the ordinary kind.



Free Book

Fill out attached coupon, mail to us, and receive free booklet describing and illustrating all styles. Or, if more convenient, send us a postal now.

O. C. Hansen Mfg. Co.
126 Detroit Street
Milwaukee, Wis.

O. C. Hansen Mfg Co.,
126 Detroit St. Milwaukee, Wis.

Please send me your Free Book illustrating and describing your styles of gloves and mittens. I am most interested in the following style:

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Address .....

Town..... State.... 18707

ELGIN WATCHES ON CREDIT

CHRISTMAS SPECIAL! $16.50

17-Jewel Genuine Elgin in a 20-year Gold Filled Case—sent Prepaid on Free Trial at our Rock-Bottom Wholesale price of only

Let us send you this beautiful 17-Jewel Elgin Watch, complete in 20-Year Gold-Filled Case

No Money Down—$2 A Month

$2.50 AFTER EXAMINATION.

You assume no risk in dealing with us, because, before you buy or pay one cent we place the watch right in your own hands and let it do its own talking. We ask NO SECURITY and NO INTEREST. Just plain, honest, straightforward, business dealings with honest men. Our Elgin Watches are so well known and our plan so easy that no matter where you live or how small your wages, WE WILL TRUST YOU, so that you and every honest man and woman can own a HIGH GRADE Elgin Watch in a beautiful Guaranteed 20-year Gold Filled case and wear it while paying for it in such small payments that you never miss the money. Write Today for Our Big Free Watch and Jewelry Catalog. It tells all about our easy credit plan and how we send Elgin 18-Jewel R. W. Raymond and 21 and 23-Jewel Elgin Veritas everywhere on Free Trial, without security or one cent deposit positively Guaranteed to Pass Any Railroad Inspection

P. STEPHEN HARRIS, Pres.
I want to send you a free copy of my latest book "Facts in Brief" about the Watch Business, both at home and abroad.

1912 Catalog NOW READY ASK FOR IT.

HARRIS-GOAR CO., Dept. 291, KANSAS CITY, MO. The House That Sells More Elgin Watches Than Any Other Firm in the World.

Big Space

"One day the president of the company [The Æolian Company] noticed Cyrus H. K. Curtis' work in building the circulation of the *Ladies' Home Journal*. Mr. Curtis was using four-page inserts in the standard magazines and his subscribers were coming in hand over fist. Mr. Tremaine tried a four-page insert in *Munsey's Magazine*, a pretty big contract for the then small concern. The copy was full of meat and it told a pretty long story,—in other words, it wasn't just a big display, hurrah-boys sort of thing. The direct results were so remarkable that the company became a convert to big space and has so continued ever since, within reasonable limitations."—*John Irving Romer, in Printers' Ink, October 5, 1911.*

In the last six months, MUNSEY'S MAGAZINE has carried seven four-page advertisements.

Each of these appeared exclusively in THE MUNSEY—no other medium was used.

One of them—the City of Ottawa, Canada—has produced 1206 inquiries to date, the most successful single piece of municipal publicity ever printed.

Another—George P. Ide & Company—is the largest collar advertisement ever run in a general magazine.

It would seem that the theory of big space, in the right medium, is as sound today as it was when Mr. Tremaine used THE MUNSEY to try it out.

THE FRANK A. MUNSEY COMPANY, 175 FIFTH AVE., NEW YORK

[illegible] when you see an advertisement on these pages it is evidence that your station RAILROAD MAN'S MAGAZINE

Fighting the Trust

READ!

A Watch Offer Without Parallel

Write for our FREE book on watches; a book that posts you on "selling systems," and explains the reasons for our most remarkable rock-bottom-price offer DIRECT TO YOU on the highest grade Burlington.

IF YOU WANT a highest grade watch (ladies' or gentlemen's), or if you ever expect to own such a watch, write NOW for the free Burlington book. See coupon below.

We **won't** "knuckle down" to selling systems among dealers, so we have decided to make such a tremendous and wonderful offer direct to the public on a first-class time piece, that no trust, no dealers under contract will or can stop us.

You too will seize this opportunity to get the "Burlington Special" direct on this wonderful offer.

You should not buy a worthless watch just because it is cheap. Nor need you pay trust prices now for a top-notch watch. The free Burlington book explains.

$2.50 A Month At An Anti-Trust Price

$2.50 a month for the world's most superb time piece! The easiest payments at the rock-bottom—the **Anti-Trust** price. *To assure us that* **everybody** *will quickly accept this introductory direct offer, we allow cash or easy payments just as you prefer.*

No Money Down

We ship the watch on approval, prepaid (your choice of lady's or gentleman's open face or hunting case). You risk absolutely nothing—you pay nothing—not one cent—unless you **want** the great offer after seeing and thoroughly inspecting the watch.

Get the FREE Burlington Book

THIS BOOKLET will quickly convince you too that you **DO** want an Anti-Trust watch—made in the independent factory that is fighting the trust as best it can by giving better quality and superior workmanship throughout; we will quickly convince you that the Burlington watch, on which there is only **one** rock-bottom price (the same rock bottom price everywhere) is THE watch for the discriminating buyer, that it is THE watch for the man or woman who wants, not the largest selling brand which everybody has, but the **best** watch, the watch bought by experts, THE watch that is absolutely perfect in its many points of superiority—the **Burlington Watch.**

You will be posted on **inside facts** and prices when you send for the Burlington Company's free book on watches.

Now, Write for the free book. It will tell you what you ought to know before you even examine a watch. It will tell you the inside facts about watch prices, and will explain the many superior points of the Burlington over the double priced trust products. Just send your name and address.

No Letter Is Necessary—* COUPON *Will Do

CUT OR TEAR ALONG THIS LINE

BURLINGTON WATCH CO.
SUITE 1109, 19TH AND MARSHALL BLVD.
CHICAGO, - ILLINOIS

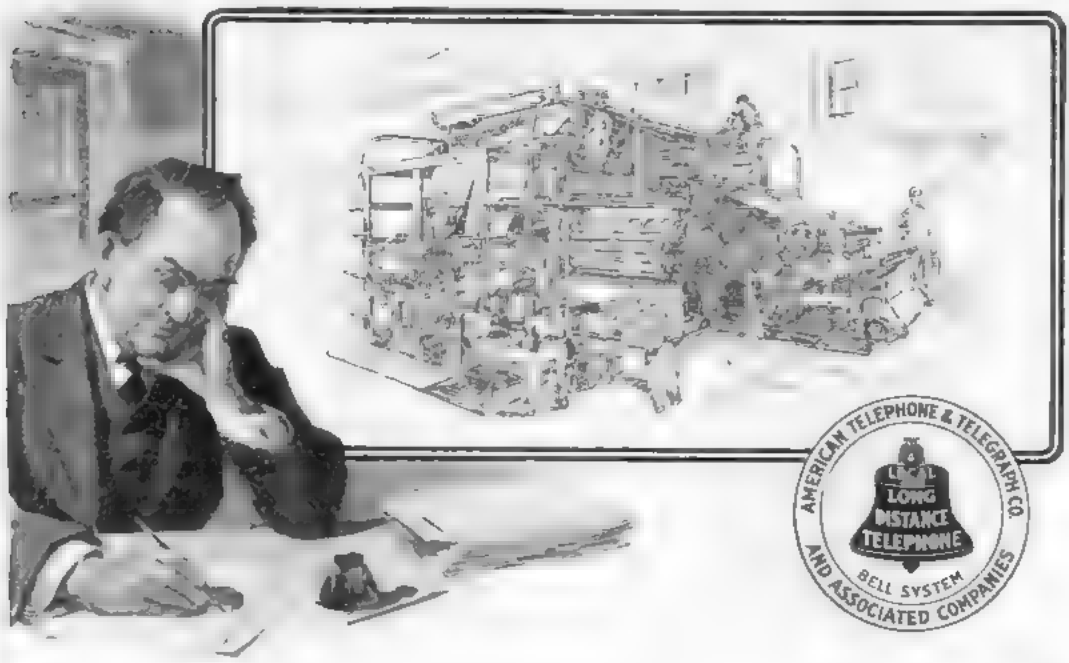
Please send me (without ... obligations and prepaid) ... your free book on watches ... and ... of your ... month offer on the Burlington Watch.

Name .....

Address .....

.....

BURLINGTON WATCH COMPANY
Suite 1109, 19th and Marshall Blvd., Chicago, Ill.



For Universal Service

The Press and the Bell System

The power of the individual writer is multiplied by the printing press. In the same way the power of the individual telephone is multiplied by the Bell system. In both cases, increased usefulness comes from progress towards universal service.

By means of the press the knowledge and thoughts of writers are spread throughout the land, maintaining among all the people the common language and the mutual understanding which makes for national co-operation.

By means of the Bell system, each individual telephone becomes connectable with every other telephone and each unit in the nation is given a personal membership in the most highly developed system of communication that the world has ever seen.

The press prepares people for co-operation; the Bell telephone system enables them to really co-operate. The press educates people separately; the telephone enables them to act upon their mutual knowledge immediately and at any distance.

By co-operation with telegraph and cable systems, universal service for communication is being made international.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy ***One System*** ***Universal Service***

In answering this advertisement it is desirable that you mention RAILROAD MAN'S MAGAZINE

Fighting the Trust

READ!

A Watch Offer Without Parallel

Write for our FREE book on watches; a book that posts you on "selling systems," and explains the reasons for our most remarkable rock-bottom-price offer DIRECT TO YOU on the highest grade Burlington.

IF YOU WANT a highest grade watch (ladies' or gentlemen's), or if you ever expect to own such a watch, write NOW for the free Burlington book. See coupon below.

We **won't** "knuckle down" to selling systems among dealers, so we have decided to make such a tremendous and wonderful offer direct to the public on a first-class time piece, that no trust, no dealers under contract will or can stop us. **You too** will seize this opportunity to get the "Burlington Special" direct on this wonderful offer.

You should not buy a worthless watch just because it is cheap. Nor need you pay trust prices now for a top-notch watch. The free Burlington book explains.

$2.50 A Month At An Anti-Trust Price

$2.50 a month for the world's most superb time piece! The easiest payments at the rock bottom—the **Anti-Trust** price. *To assure us that* **everybody** *will quickly accept this introductory direct offer, we allow cash or easy payments just as you prefer.*

No Money Down

We ship the watch on approval, prepaid (your choice of lady's or gentleman's open face or hunting case). You risk absolutely nothing—you pay nothing—not one cent—unless you **want** the great offer after seeing and thoroughly inspecting the watch.

Get the FREE Burlington Book

THIS BOOKLET will quickly convince you too that you **DO** want an Anti-Trust watch—made in the independent factory that is fighting the trust as best it can by giving better quality and superior workmanship throughout, we will quickly convince you that the Burlington watch, on which there is only **one** rock bottom price (the same rock-bottom price everywhere) is THE watch for the discriminating buyer; that it is THE watch for the man or woman who wants, not the largest selling brand which everybody has, but the **best** watch, the watch bought by experts, THE watch that is absolutely perfect in its many points of superiority—the **Burlington Watch.**

You will be posted on inside facts and prices when you send for the Burlington Company's free book on watches.

Now, Write for the free book. It will tell you what you ought to know before you even examine a watch. It will tell you the inside facts about watch prices, and will explain the many superior points of the Burlington over the double priced trust products. Just send your name and address.

No Letter Is Necessary—COUPON Will Do

CUT OR TEAR ALONG THIS LINE

BURLINGTON WATCH CO
SUITE 1109, 19TH AND MARSHALL BLVD.
CHICAGO, - - ILLINOIS

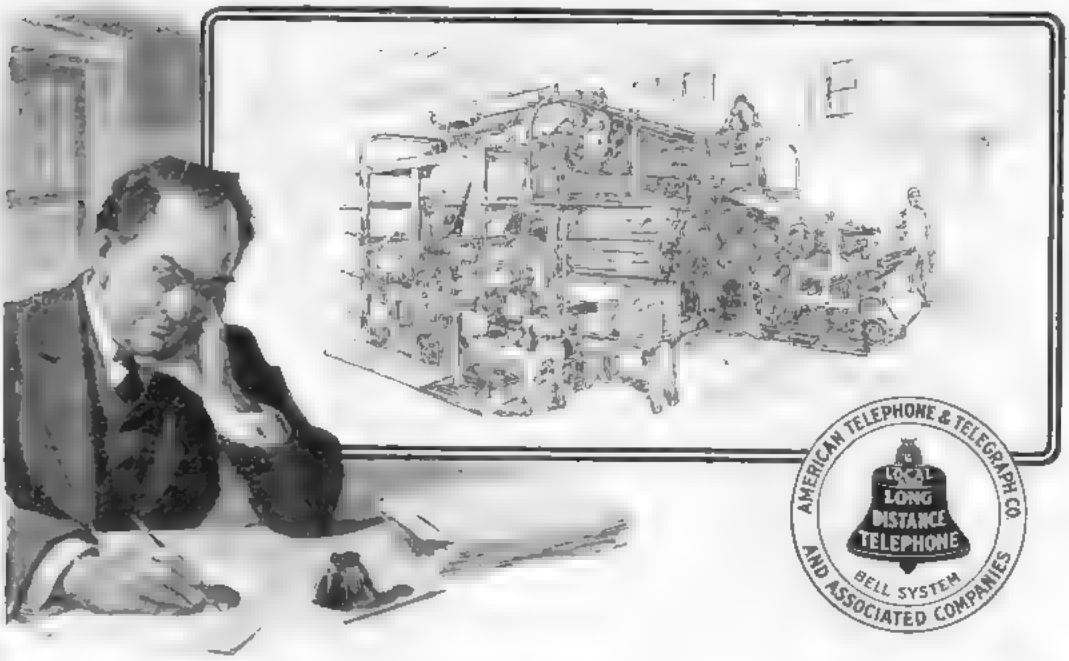
Please send me (without obligations and prepaid) your free book on watches and particulars of your $2.50 a month offer on the Burlington Watch.

Name .....

Address .....

.....

BURLINGTON WATCH COMPANY
Suite 1109, 19th and Marshall Blvd., Chicago, Ill.



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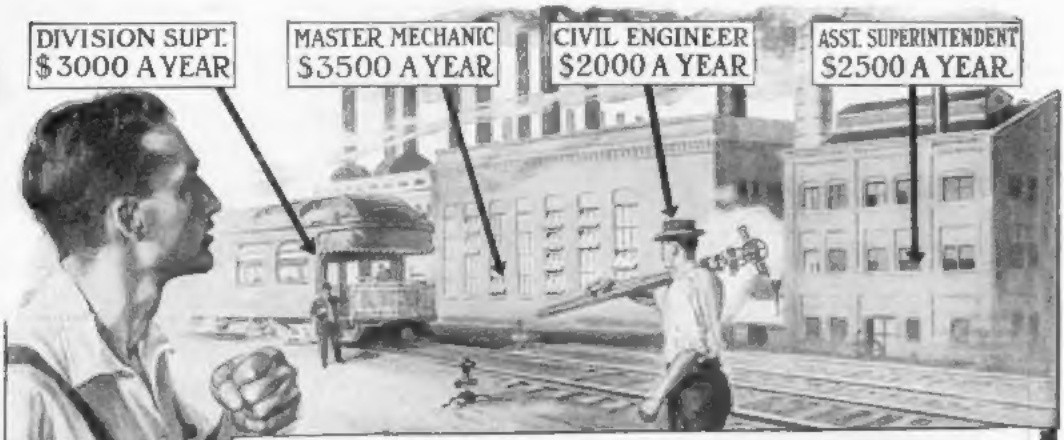

YOU can do what others do!

You *can*—if you really want to. You can fit yourself to earn *more* than the other fellows. For they are not naturally any smarter than you. They haven't any more brains or ambition than you. They don't work any harder than you. They are simply *trained men*—that's the difference. They have *special knowledge* that you don't possess—*special knowledge* and *training* that make them *worth more* to their employer than you can possibly be until *you* equip *yourself* with special knowledge and training.

The American School is training *hundreds* of men to become draftsmen, engineers and architects. It is training hundreds to fill executive positions, to earn *good* salaries, to play a man's part in the business game. *And what the American School of Correspondence is doing for others it can do for you.*

Mark the Coupon

and send it back to us *on the next mail.* That's the first step towards getting your name higher up on the payroll—the first step towards getting the kind of position *you'd like to have,* the kind of a salary *you ought to have.*

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CHICAGO, U. S. A.

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American School of Correspondence, Chicago, U. S. A.
Please send me your Bulletin and advise me how I can qualify for the position marked "X." R. R. Man's 12-11

.....Aviator	.....Lawyer
.....Draftsman	.....Fire Insurance Eng'r
.....Architect	.....Telephone Expert
.....Building Contractor	.....Moving Picture Op'r
.....Structural Engineer	.....Book-keeper
.....Civil Engineer	.....Stenographer
.....Electrical Engineer	.....Accountant
.....Elec. Light & Power Supt.	.....Cost Accountant
.....Master Mechanic	.....Certified Public Ac'tant
.....Sanitary Engineer	.....Auditor
.....Steam Engineer	.....Business Manager
.....Reclamation Engineer	.....College Preparatory

NAME .....

ADDRESS .....

RW

A Christmas Morning

KODAK

All the child-world invites your Kodak. Wherever the children are there is endless opportunity for a Kodak story—a story full of human interest to every member of the family. And there's no better time to begin that story than on the *home* day—Christmas.

There are Kodaks now to fit most pockets and all purses and practical little Brownies, that work on the Kodak plan and with which even the children can make delightful pictures of each other. There are Brownies as cheap as one dollar and Kodaks from five dollars up—no excuse now for a Christmas without the home pictures. Write for our catalogue—or better still, let your dealer show you how simple and inexpensive Kodakery has become.

Make somebody happy with a Kodak.

EASTMAN KODAK COMPANY, Rochester, N. Y., *The Kodak City.*

"Have You a Little 'Fairy' in Your Home?"

Fairy Soap has a Dainty, Refreshing Odor

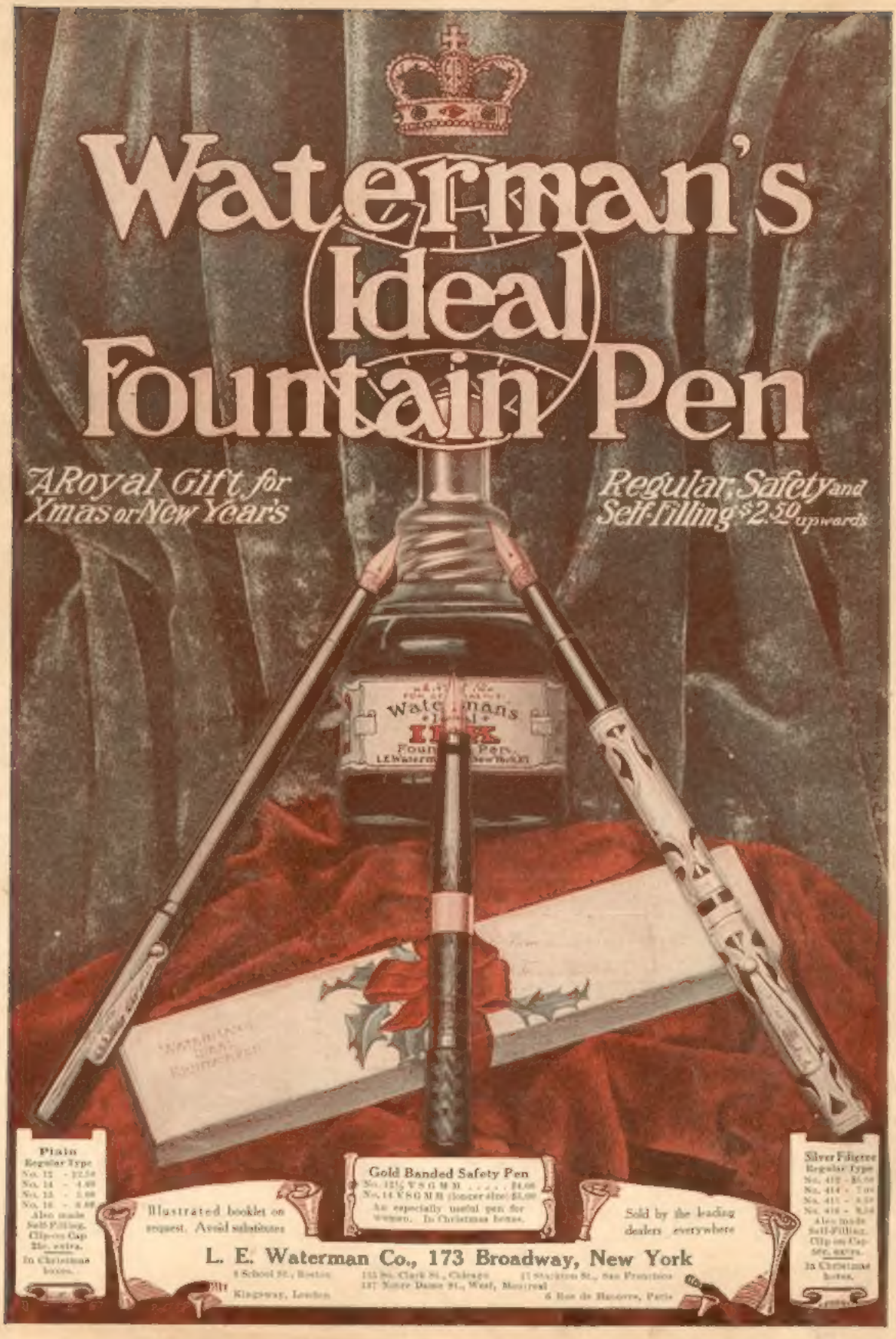
Compare Fairy Soap with any other white toilet soap—in appearance, odor, shape and use. Fairy Soap is made from high grade vegetable oils! It is dainty, refined and delicate in perfume. It has the looks, odor and performance of a high-class product.

Fairy Soap—the pure, white, floating, oval cake—costs but 5c.

THE N. K. FAIRBANK COMPANY
CHICAGO

Send 10 cents, stamps, for copy of Fairbank's "Juvenile History of the United States."—Interesting, instructive, illustrated by Denslow. Address, The N. K. Fairbank Company, Department 2, Chicago, Ill.

RC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Ideal
Fountain Pen
A Royal Gift for Xmas or New Year's
Regular, Safety and Self-Filling $2.50 upwards
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Also made Self-Filling. Clip-on Cap 25c. extra.
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